
Environmental Assessment
for
Replace Military Family Housing - Phase VI
MacDill AFB, Florida



Headquarters Air Mobility Command

Scott AFB, IL

January 2005

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**FINDING OF NO SIGNIFICANT IMPACT
AND
FINDING OF NO PRACTICABLE ALTERNATIVE
REPLACE MILITARY FAMILY HOUSING - PHASE VI
MACDILL AIR FORCE BASE, FLORIDA**

Agency: United States Air Force (USAF), Headquarters, Air Mobility Command

Background: Pursuant to the President's Council on Environmental Quality (CEQ) regulations, Title 40 Code of Federal Regulations (CFR) Parts 1500-1508, as they implement the requirements of the National Environment Policy Act (NEPA) of 1969, 42 U.S.C. § 4321, et seq., and the Air Force Environmental Impact Analysis Process, as promulgated in 32 CFR Part 989, the U.S. Air Force conducted an assessment of the potential environmental consequences associated with implementation of the following Proposed Action: to demolish approximately 22 existing substandard housing buildings (152 units), and to construct approximately 41 new military family housing buildings (61 units) as part of MacDill Air Force Base's Phase VI housing project. The environmental assessment considered all potential impacts of the Proposed Action and alternatives, both as solitary actions and in conjunction with other proposed activities. The Finding of No Significant Impact (FONSI) summarizes the results of the evaluation of the Proposed Action and alternatives. The discussion focuses on activities that have the potential to change both the natural and human environments. The Finding of No Practicable Alternative (FONPA) summarizes the options considered and why the proposed new military family housing buildings were designed and sited as proposed.

PROPOSED ACTION: Demolish approximately 22 existing substandard housing buildings (152 units), and construct 41 new both single- and multi-family style military family housing buildings (61 units). The new housing units will be constructed on a site where family housing units were previously demolished. The Proposed Action also includes the removal of additional material including fencing, asphalt from roadways and parking lots, curbs and sidewalks, recreational equipment, storm drains, electric lines and light poles.

Alternatives: Two alternatives to the Proposed Action were evaluated during the environmental impact analysis process. The first alternative evaluated was the Remodel Existing Housing Alternative, which included the extensive remodeling of approximately 152 existing housing units. The No Action Alternative was also evaluated and would result in no construction or demolition activities. The environmental assessment process identified the Proposed Action as the preferred course of action since it best suits the needs of both military personnel and MacDill AFB and when implemented using current design and construction standards will not result in significant environmental impacts. The environmental consequences associated with implementation of the Proposed Action are summarized in the following sections.

Air Quality: Fugitive dust and construction vehicle exhaust will be generated during construction and demolition activities; however, these emissions will not constitute a major source of air pollutants. The estimated values for carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur oxides (SO_x), and particulate matter (PM₁₀) were determined to be less than USEPA *de minimis* values and less than 10% of the Hillsborough County emissions inventory and will not be a regionally significant source of air emissions; therefore, an air conformity analysis is not necessary.

*Finding of No Significant Impact and Finding of No Practical Alternative
Replace Military Family Housing - Phase VI*

Noise: Noise levels will increase temporarily during construction; however, the increased noise levels would not be continuous, will occur mostly during daylight hours, and it is believed that the work force at the base will accept the temporary increase in noise since they will benefit from the project.

Wastes, Hazardous Materials and Stored Fuels: Materials containing lead-based paint and asbestos will be abated prior to the demolition of the existing housing buildings. The project will not adversely affect any hazardous waste sites. Consequently, the Proposed Action will not result in significant impacts from hazardous materials or wastes. There will be no impacts to stored fuels with implementation of the Proposed Action.

Water Resources: There will be no significant impacts to surface or ground water quality during construction of the new military family housing, or as a result of demolition of the existing housing. MacDill will secure the appropriate permits to insure compliance with state storm water management and Phase II National Pollution Discharge Elimination System requirements. Best management practices will be implemented to reduce soil erosion at construction and demolition sites.

Floodplains: Currently, 80 percent of MacDill AFB is located within the coastal floodplain. The 20 percent of the installation that is not located within the floodplain is primarily being used for airfield operations and support. Construction of the Phase VI military family housing will take place within the 100-year coastal floodplain, on the east central side of the base. The existing housing buildings slated for demolition under the Proposed Action also lie within the 100-year floodplain, on the east central side of the base. All of the new housing units will be constructed on fill material to raise the building foundation above the 100-year floodplain elevation. Implementation of the Proposed Action will have a minor positive impact on the floodplain, since there would be a net decrease in the amount of impervious surface within the floodplain, and because construction of storm water retention areas will collect storm water runoff and direct it back into the ground.

Transportation Systems: An increase in traffic in the east central portion of the base would result during implementation of the Proposed Action, due to the increase in construction-related activities. These impacts are considered to be minor and short-term. No long-term impacts to transportation would result from the Proposed Action, as the overall number of housing units would decrease, but the number of personnel working on-base would remain the same.

Safety and Occupational Health: Construction of Phase VI military family housing, demolition of the existing housing, removal of the paved parking areas and associated structures would not pose safety hazards beyond those typically experienced with a construction project. Previous, limited scope surveys of housing units at MacDill AFB have detected lead-based paint and asbestos-containing building materials. A lead-based paint survey and asbestos survey has been completed at two of the housing units proposed for demolition. Since each of the housing units are very similar, for example, they were constructed by the same contractor around the same time frame using identical building materials, the results from the survey for the "sample" housing unit shall be used to manage any hazardous building materials for all of the housing units. All of the asbestos and lead-based paint-containing materials identified during the survey

*Finding of No Significant Impact and Finding of No Practical Alternative
Replace Military Family Housing - Phase VI*

will be abated prior to demolition of the buildings. Implementing this approach will greatly reduce the potential for health and safety impacts to construction workers. The Proposed Action will not have a significant impact on safety and occupational health.

Socioeconomic Resources: The Proposed Action would cost approximately \$21.7 million to complete, based on 2003 cost estimates. This would equal approximately 4.4 percent of the nearly \$494 million annual expenditures that MacDill AFB provides to the local economy, and would constitute a moderate beneficial impact.

Biological Resources: Adverse impacts on wetlands (including wetland communities of Tampa Bay), wildlife, aquatic life, or protected species would not occur during the construction or the demolition operations of the Proposed Action. Consultation with the United States Fish and Wildlife Service indicates that there will be no adverse impacts on threatened or endangered species during construction of the Phase VI military family housing. Jurisdictional wetlands will not be filled, altered or impacted by construction of the new housing or by the demolition associated with the project.

Land Use: The Proposed Action would involve construction of the new military family housing, and the removal of several paved parking lots on land currently designated for residential use. Implementation of the Proposed Action would not affect land use designation, and no impacts to land use would result.

Airspace/Airfield Operations: Construction of Phase VI military family housing, or demolition of the existing housing, would not impact airspace/airfield operations.

Cultural Resources: There will be a no impact to cultural resources with construction of Phase VI military family housing, or from the demolition of the existing housing.

Environmental Justice: No disproportionately high or adverse effects on minority or low-income populations will occur as a result of the Proposed Action.

Environmental Management (including Geology and Soils): Residents of the new military family housing units would participate in base recycling programs to reduce solid waste disposal volumes. During construction and demolition activities, soil erosion in disturbed areas will be controlled by implementation of a sediment and erosion control plan as well as best management practices.

Indirect and Cumulative Impacts: There are no site-specific direct, indirect, or cumulative impacts associated with the Proposed Action, or from the long-term operation of the new military family housing units. The construction and demolition activities of the Proposed Action were considered in conjunction with other on-going or planned construction projects, and found that together they do not constitute a significant cumulative impact.

Unavoidable Adverse Impacts: There are no unavoidable significant impacts associated with the construction or demolition activities, or from the long-term operation of the new military family housing units.

Relationship Between Short-term Uses and Enhancement of Long-term Productivity:

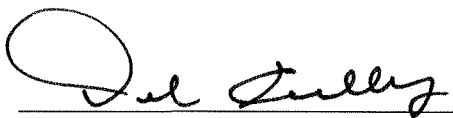
Implementation of the Proposed Action would have a positive effect on long-term productivity by providing modern, safe, and energy-efficient housing for use by military personnel living on-base.

Irreversible and Irretrievable Commitment of Resources: The construction and demolition activities of the Proposed Action would irreversibly commit fuels, manpower and costs related to constructing a useable facility for the installation.

Florida Coastal Zone Management: In accordance with the Federal Coastal Zone Management Act (CZMA) and the Florida CZMA, this Federal action must be consistent "to the maximum extent practicable" with the Florida Coastal Management Program (CMP). In accordance with Florida statutes, the State of Florida has reviewed the attached EA, which includes the Air Force's Consistency Statement, and agrees that the proposed action is consistent with the Florida CMP.

FINDING OF NO SIGNIFICANT IMPACT: Based upon my review of the facts and analyses contained in the attached Environmental Assessment, incorporated by reference, I conclude that implementation of the Proposed Action will not have a significant environmental impact, either by itself or cumulatively with other projects at MacDill AFB. Accordingly, the requirements of NEPA, the regulations promulgated by the Council on Environmental Quality and the Air Force are fulfilled and an Environmental Impact Statement is not required. The Tampa Tribune published a Notice of Availability on September 29, 2004. No comments were received during the public comment period ending October 30, 2004. The signing of this combined Finding of No Significant Impact and Finding of No Practicable Alternative (FONSI/FONPA) completes the environmental impact analysis process under Air Force regulations.

FINDING OF NO PRACTICABLE ALTERNATIVE: Pursuant to Executive Order 11988, the authority delegated in Secretary of the Air Force Order (SAFO) 791.1, and taking the above information into account, I find that there is no practicable alternative to locating the Phase VI military family housing at the referenced sites. Approximately 80 percent of MacDill AFB is located within the coastal floodplain. The 20 percent of the installation that is not located within the floodplain is primarily being used for airfield operations and support. The Proposed Action will replace existing undersized and outdated housing which is also located within the floodplain. The Proposed Action, as designed, includes all practicable measures to minimize harm to the coastal floodplain. The Air Force has sent all required notices to Federal agencies, single points of contact, the State of Florida, local government representatives, and the local news media.



DEL EULBERG

Brigadier General, USAF

Director, Installations and Mission Support

Attachment: Environmental Assessment

20 July 05
DATE

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1.0 PURPOSE OF AND NEED FOR PROPOSED ACTION

This Environmental Assessment (EA) identifies, describes, and evaluates potential environmental impacts associated with the proposed construction of new military family housing units, and the demolition of existing housing units as part of Phase VI of the Base Housing Master Plan at MacDill Air Force Base (AFB) (the Proposed Action), as well as alternatives to the Proposed Action, including the Remodel Existing Units Alternative, and the No Action Alternative.

1.1 PURPOSE OF THE PROPOSED ACTION

The Proposed Action is intended to provide MacDill AFB families with modern, safe, and comfortable living quarters. The new housing units would also be constructed with more space between the units to decrease housing density on the base. The new housing area would provide more convenient and additional parking areas which would improve the living conditions for the MacDill AFB housing community. In addition, the new family housing units would be designed for energy efficiency to meet base energy conservation goals.

1.2 NEED FOR THE PROPOSED ACTION

Much of MacDill AFB's existing family housing was constructed in the early 1950's under the Wherry Military Housing Act of 1949. The 1950's vintage housing no longer meets modern living or energy efficiency standards due to age and deterioration, and economic analysis (Air Force Manual 32-1089 *Air Force Military Construction and Family Housing Economic Analysis Guide*) recommends replacement. Replacing substandard housing with modern and efficient housing would meet current Air Force standards for military housing, including authorized net square footage requirements. The Proposed Action is programmed in accordance with the Housing Community Plan and meets the criteria/scope specified in Part II of Military Handbook 1190, "Facility Planning and Design Guide."

The current housing units are undersized, outdated, and may adversely affect the morale of personnel and their family members assigned to the base. Deficiencies associated with the existing housing proposed for replacement include the following:

- Roof, walls, foundation, and exterior pavements require major repair or replacement;
- Plumbing and electrical systems are antiquated and do not meet current standards for efficiency or safety;
- Lack of adequate parking spaces for occupants creates congestion and safety hazards;
- Housing density is high, creating a noisy living environment;
- Housing interiors are inadequate by modern criteria; the rooms are small and lack sufficient storage space;
- Flooring throughout the housing is worn and some contains asbestos, wall mastic also contains asbestos;
- Lead-based paint has been identified in the baseboards, walls, doors, and plaster of multiple housing units;
- Storm water within the area is not managed appropriately in accordance with current storm water management practices; and
- Current housing elevations are susceptible to flooding from a 100-year storm event.

The need for this EA was originally outlined on AF Form 813, a copy of which is included in Appendix A.

1.3 OBJECTIVES OF THE PROPOSED ACTION

The objective of the Proposed Action is to provide modern, safe, energy efficient housing for military personnel and their dependants at MacDill AFB. The new housing would be dispersed to reduce housing density and would provide parking closer to the housing units. The new housing would be constructed in the vicinity of the other base housing areas and facilities to create a well planned, spacious housing community on MacDill AFB.

1.4 LOCATION OF THE PROPOSED ACTION

The Proposed Action would take place at MacDill AFB. The base occupies approximately 5,630 acres in Hillsborough County adjacent to the City of Tampa, at the southern tip of the Interbay Peninsula. The base is surrounded on three sides by Tampa Bay and Hillsborough Bay, and is bordered on the north by development within the City of Tampa. The residential area on MacDill AFB is located along the eastern portion of the base, near the shoreline of Hillsborough Bay. The site on the base is proposed for construction of the Phase VI family housing units is shown on

Figure 1-1). The roughly 30-acre site is bounded by Bayshore Boulevard on the east and Carthy Drive on the north, west, south. The site is located adjacent to and north of the recently constructed Phase III/IV family housing area, and adjacent to and south of the site proposed for construction of Phase VII family housing.

1.5 SCOPE OF THE ENVIRONMENTAL REVIEW

This EA identifies, describes, and evaluates potential environmental impacts associated with construction of new military family housing units at MacDill AFB and the demolition of some of the existing substandard housing units. This environmental analysis has been conducted in accordance with the President's Council on Environmental Quality (CEQ) regulations, Title 40 of the Code of Federal Regulations (CFR) §§1500-1508, as they implement the requirements of the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §4321, et seq., and the Air Force Environmental Impact Analysis Process, as promulgated in 32 CFR Part 989.

The Federal Coastal Zone Management Act (CZMA) requires Federal agencies carrying out activities subject to the Act to provide a "consistency determination" to the relevant state agency. The Air Force's Consistency Determination is contained in the Consistency Statement in Appendix B. This EA, including the Air Force's Consistency Statement, was submitted to the Florida State Clearinghouse for a multi-agency review. The Florida Department of Community Affairs, with input from state and county agencies, determined that the proposed project is consistent with the Florida Coastal Management Program (Appendix C).

1.6 ENVIRONMENTAL PERMIT REQUIREMENTS

It is anticipated that completion of this project would require application for a storm water management permit from the Southwest Florida Water Management District (SWFWMD) for the construction of the proposed family housing units and impervious parking areas. In addition, as the site is larger than one acre in area, a National Pollutant Discharge Elimination System (NPDES) Phase II storm water construction permit would also be required.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This section provides a description of the Proposed Action and alternatives to the Proposed Action. The Proposed Action is to provide modern efficient housing for military members and their families. Under the Proposed Action, 61 new military housing units (41 buildings, 21 single-family and 20 multi-family) would be constructed and 152 existing substandard housing units (22 buildings), as well as two multi-bay garage units, would be demolished. Under the Remodel Existing Units Alternative, 152 existing units would be extensively remodeled. Under the No Action Alternative, the new housing units would not be constructed at MacDill AFB, and routine maintenance and repairs to the existing housing units would continue on an as-needed basis.

2.1 SELECTION CRITERIA

The new family housing units are required to be located within the existing military community; specifically, the area of MacDill AFB that has been outlined in the base comprehensive plan (*MacDill AFB 2010 Plan*) as residential (USAF, 2002). The site proposed for construction of the Phase VI housing is located directly adjacent to and north of the Phase III/IV housing area and adjacent to and south of the proposed (future) Phase VII housing area, as depicted in the Base Housing Master Plan (a portion of which is included as Figure 2-1).

2.2 DETAILED DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action can be divided into demolition activities and subsequent construction activities.

This project is the sixth phase of a ten-phase plan that will result in construction of 61 new housing units.

For the specific activities proposed under the Phase VI plan, there are currently 36 buildings and two large multi-bay garages in the area. Twelve buildings (85 units) in the area of the Proposed Action site will be demolished as part of the Phase V housing project; two buildings (16 units) will be demolished as part of base Operations and Maintenance, and the remaining 22 housing buildings (152 units) and two multi-bay garages within the site would be demolished during the Phase VI housing project. Of note, some of the buildings listed for demolition in the Phase V

housing project EA include some of the same buildings being proposed for demolition under this EA. The buildings designated for demolition have changed due to revisions of the Military Family Housing demolition plan that occurred after the Phase V EA was finalized.

All of the buildings to be demolished under the Phase VI housing project are located along Kenwere Drive, Carthy Court, or Bayshore Boulevard. Additional material to be removed as part of the demolition includes fencing, asphalt from roadways and parking lots, curbs and sidewalks, recreational equipment, storm drains, electric lines and light poles. Upon completion of the demolition activities, the land would be graded and leveled to prepare the site for construction.

The major construction activities would be to build approximately 41 new buildings, both multi-family and single-family style, creating a total of 61 new housing units. Each unit would vary from 950 to 2,000 square feet in area, and contain two to four bedrooms. The houses would be single-family, slab-on-grade units. The replacement housing would provide a modern kitchen, living room, dining room, and bath configuration with ample storage. Exterior storage would be included adjacent to all the units. Carport or garages would be included for most of the new units, and off-street parking would be provided for each of the new units.

Construction design includes landscaping, upgraded utilities, roads, and recreational areas. All of the units would be designed to withstand hurricane force winds and storm surges. In addition, the new housing units would be constructed above 11 feet Mean Sea Level (MSL) to raise them above the 100-year floodplain. Raising the building foundations above the floodplain is required by Section 1315 of the 1968 Flood Insurance Act, and prohibits Federal Emergency Management Agency (FEMA) from providing flood insurance unless communities adopt and enforce floodplain management regulations that meet or exceed the floodplain management criteria established in accordance with Section 1361(c) of the Act.

2.3 DESCRIPTION OF ALTERNATIVE ACTIONS

The alternative action considered for further evaluation focused upon the remodeling of the existing housing units. The alternatives retained for further evaluation are identified as the Remodel Existing Housing Alternative, and the No Action Alternative.

2.3.1 Remodel Existing Housing Alternative

Under this alternative, there would be no new construction, and 152 existing units would be extensively remodeled. The housing is over 50 years old, and has not been significantly upgraded since construction. Roofs, walls and foundations of most units, and exterior pavements throughout the area require major repair or replacement. Under this alternative, the existing housing requires asbestos removal and lead-based paint abatement. The existing units also require structural upgrades to withstand hurricane force winds and storm surges.

Under this alternative, high-density living conditions would remain, as the existing housing is multi-family apartment style complexes with buildings in close proximity. In accordance with Air Force Instruction 32-6002 *Family Housing Planning, Programming, Design, and Construction* Section 1.11.3, if the estimated cost of improvement is greater than 70 percent of the replacement cost, the Air Force may elect to replace the units. Preliminary cost estimates by the 6th Civil Engineering Squadron (6 CES) indicated that the cost for extensive renovation of the units would exceed the 70 percent threshold.

2.3.2 No Action Alternative

Under the No Action Alternative, no construction or demolition of family housing units would occur. The existing housing assets would remain in place to meet the mission of providing adequate housing for authorized personnel. The base Civil Engineer would authorize continued routine maintenance on an as-needed basis. The current off-base homeowner market is adequate for all personnel wanting to purchase housing. The area rental market is competitive, making it difficult for transitory military personnel to acquire adequate housing. Living in some of the available and/or affordable rental units would require an approximate 45-minute commute each way to and from the base. The on-base assets would continue to deteriorate, causing maintenance costs to increase over time. Continuing to use the existing assets would require personnel and families to live in outdated and unsatisfactory housing. The results would be high costs for maintenance, repair, and utilities, as well as considerable inconvenience to the occupants.

2.4 ALTERNATIVE CONSIDERED BUT ELIMINATED FROM FURTHER STUDY

The Government Leasing Alternative, was identified but determined to be impracticable for economic and logistical reasons. This alternative involved direct, long-term leasing or guaranteed

rental of suitable, privately developed housing on or off-base. Available government leased housing is greater than 30 minutes away. Although this housing is within the 60-minute maximum commute time considered acceptable by the Air Force, this alternative is not the most preferable. Government leasing of existing off-base housing in closer proximity to MacDill AFB is not practicable since there is a limited availability and is typically highly priced due to the affluent nature of the surrounding community. Off-base housing in the surrounding area that is affordable is generally of poor quality, in less than desirable locations. A previous housing market analysis confirmed this, indicating that if on-base housing was not provided non-commissioned officers would be required to live in substandard, low rent off-base housing. Areas around Tampa with affordable, readily available housing are generally located more than 30 minutes from the base.

3.0 AFFECTED ENVIRONMENT

This section describes the characteristics of the existing natural and man-made environment that could be affected by implementation of the Proposed Action including all considered alternatives. This section establishes the basis for assessing impacts of the alternatives on the affected environment provided in Section 4.0.

3.1 AIR QUALITY

The Clean Air Act (CAA), as amended in 1977 and 1990, provides the basis for regulating air pollution to the atmosphere. The United States Environmental Protection Agency (USEPA) set air quality standards for six “criteria” pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), sulfur oxides (SO_x), measured as sulfur dioxide (SO₂), lead (Pb), and particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM₁₀). These standards are the cornerstone of the CAA. Although not directly enforceable, they are the benchmark for the establishment of emission limitations by the states for the pollutants USEPA determines may endanger public health or welfare.

The Environmental Protection Commission (EPC) of Hillsborough County is responsible for issuing and enforcing the CAA Title V Air Operation Permit (Permit No. 0570141-001-AV issued 21 Oct 99) for MacDill AFB. The 1998 air emission inventory at MacDill AFB found the installation is a major source of nitrogen oxides with potential emissions of 184 tons per year.

The USEPA tracks compliance with the air quality standards through designation of a particular region as “attainment” or “non-attainment.” MacDill AFB is located in Hillsborough County within the West Central Florida Intrastate Air Quality Control Region (AQCR). Hillsborough County currently meets the USEPA air quality standards for all criteria pollutants (60 FR 62748, December 7, 1995). The county was formerly non-attainment for ozone, but is currently in maintenance of attainment.

3.2 NOISE

The day-night average sound level (DNL) developed to evaluate the total daily community noise environment applies here. In June 1980, the Federal Interagency Committee on Urban Noise published guidelines relating DNL values to compatible land uses. This committee was composed of representatives from the US Departments of Defense, Transportation, and Housing and Urban Development, the USEPA, and the Veterans Administration. Since their issuance, Federal agencies have generally adopted these guidelines for noise analysis. Most agencies have identified 65 decibels (dB) DNL as a criterion that protects those most affected by noise and that can often be achieved on a practical basis.

Base activities that have the highest potential source of noise impacts are the aircraft/airspace operations. The Air Installation Compatible Use Zone (AICUZ) Study (1996) plotted the day-night average sound level (DNL) from 65 to 80 dB for a typical busy day at MacDill. The DNL contours reflect the aircraft operations at MacDill AFB. The DNL 65 dB contour covers the main runway, and extends about one mile southwest over Tampa Bay, and about 1 ½ miles northeast over Hillsborough Bay. The proposed locations for the new military family housing units are located outside the 65 dB contour as are the existing base housing units proposed for demolition.

3.3 WASTES, HAZARDOUS MATERIALS, AND STORED FUEL

Hazardous wastes generated at MacDill AFB include solvents, fuels, lubricants, stripping materials, used oils, waste paint-related materials, and other miscellaneous wastes. The responsibility for managing hazardous waste lies with the generating organization and 6

CES/CEV. Wastes come from approximately 50 locations throughout the base and are managed at satellite accumulation points base-wide.

Approximately 105 operations base-wide use hazardous materials. Hazardous materials on-base include various organic solvents, chlorine, freon, paints, thinners, oils, lubricants, compressed gases, pesticides, herbicides, nitrates, and chromates. A detailed tracking and accounting system is in place to identify potentially hazardous materials and to ensure that base organizations are approved to use specific hazardous materials.

The base receives jet fuel (JP-8) at the Defense Fuel Supply Point (DFSP) by pipeline from Port Tampa. JP-8 storage capacity at DFSP and MacDill AFB is over 7.5 million gallons. Diesel, gasoline, and heating oil are stored throughout MacDill AFB in small to medium-sized Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs) ranging in size from 50 to 12,000 gallons, including a 12,000-gallon heating oil AST and two 5,000-gallon diesel USTs at the base hospital south of the Phase VI housing site.

There are no hazardous waste sites in the area proposed for construction or demolition. The closest site is approximately 1,500 feet from the Proposed Action site.

3.4 WATER RESOURCES

Surface water flows at the base are primarily from storm water runoff. Most of the base drains toward the southern tip of the Interbay Peninsula; however, the easternmost section of the base drains toward Hillsborough Bay.

The USEPA issued a National Pollutant Discharge Elimination System (NPDES) multi-sector storm water general permit (No. FLR05B679) to MacDill AFB in July 2003. This permit authorizes the discharge of storm water associated with industrial activity. In accordance with 40 CFR 112, *Oil Pollution Prevention and Response; Non-Transportation-Related Onshore and Offshore Facilities*, the base has developed a Spill Prevention Control and Countermeasures (SPCC) Plan and a Facility Response Plan given the location of the base adjacent to navigable waters and shorelines, as well as the amount of fuel storage capacity existing on site.

3.5 FLOODPLAINS

According to information provided by the FEMA Maps dated 1982-1991, about 80 percent of the base is within a 100-year coastal floodplain (see Figure 3-1). The maps indicate that all the residential, industrial, and institutional (medical and education) land uses on the base are within the 100-year floodplain, along with most of the commercial and aviation support areas. The remaining 20 percent of land that is above the floodplain is designated primarily for airfield operations.

The extent of the floodplain is an important consideration for MacDill AFB because Executive Order (EO) 11988, and the floodplain management criteria contained in 44 CFR Part 60, *Criteria for Land Management and Use*, regulates the uses of these areas. The objective of this presidential order is to avoid to the extent possible the long- and short-term adverse impacts associated with occupancy and modification of floodplains. The order applies to all Federal agencies conducting activities and programs that may potentially affect floodplains. To comply with EO 11988, before taking any action, the Air Force must evaluate the impacts of specific proposals in the floodplain.

The site proposed for construction of the new military family housing units is located in the 100-year coastal floodplain. As noted, approximately 80 percent of the land mass of MacDill AFB is located within the 100-year coastal floodplain, with 20 percent located above the floodplain almost entirely used for airfield operations and is not suitable for family housing. In addition, locating the new housing units outside the 100-year floodplain would separate them from the existing residential area of MacDill AFB, which does not meet the objectives of the Proposed Action or the *MacDill Air Force Base General Plan*. The existing military family housing units proposed for demolition are also located in the 100-year coastal floodplain.

3.6 TRANSPORTATION SYSTEMS

The ground transportation to MacDill AFB is served by four operating gates at Dale Mabry Highway, Bayshore Boulevard, MacDill Avenue, and Manhattan Avenue. The Dale Mabry, MacDill, and Bayshore gates are used for government and personal vehicles (commuter traffic). The Manhattan Gate is used as the large vehicle (contractor trucks, deliver vehicles, recreational

vehicles) entry point. Large vehicles are inspected and their credentials and destination are confirmed before entering the base.

The ground transportation system on base consists of arterials, collectors, and local streets that connect with the off-base network through the four gates. On-base arterial streets include North and South Boundary Boulevards, Bayshore Boulevard, Marina Bay Drive, and Tampa Point Boulevard. A 1998 traffic study determined that service levels for traffic on-base are generally acceptable.

3.7 SAFETY AND OCCUPATIONAL HEALTH

The MacDill AFB Asbestos Management Plan identifies procedures for management and abatement of asbestos. Prior to renovation or demolition activities, asbestos sampling is performed; and, if present, the asbestos is removed in accordance with applicable Federal and state regulations.

Some limited-scope asbestos surveys have been completed at the housing units proposed for demolition. These files are maintained on-base at 6 CEV/CES, Building 147, Room 304. Typically, these surveys were completed prior to the completion of small-scale renovation projects. Asbestos fibers were identified as being present in numerous screening reports on file, with asbestos containing materials (ACMs) typically including floor tile and mastic in water heater rooms, tile and mastic in air conditioning closets, and kitchen and bathroom linoleum.

In May 2004, an asbestos survey was completed on four buildings considered representative of those proposed for demolition. Asbestos surveys were completed at 1917 Kenwere Drive, 8203 Bayshore Boulevard, 2001 Cathy Court, and 8217 Bayshore Boulevard. The buildings at 1917 Kenwere Drive and 8203 Bayshore Boulevard are within the area of the Proposed Action, with the remaining two buildings nearby. Certain floor tiles, tile mastic, and drywall joint compound were found to contain asbestos during this survey.

The base engineer assumes that all structures constructed prior to 1978 possibly contain lead-based paint (LBP). When required, LBP abatement is accomplished in accordance with

applicable Federal and State regulations and base procedures prior to demolition activities to prevent any health hazards.

LBP has been identified in the baseboards, walls, doors, and plaster of multiple housing units throughout the base. Concurrent with the ACM survey of May 2004, a lead-based coatings survey of the four buildings noted above was completed. Lead-based coatings were identified on doors, baseboards, drywalls, ceramic tiles, etc., with several of the ceramic tiles reportedly containing lead concentrations above the EPA/HUD definition of lead-based paint. Files containing LBP sampling results can also be found at 6 CEV/CES, Building 147, Room 304.

3.8 SOCIOECONOMIC RESOURCES

The Economic Impact Region (EIR) for MacDill AFB is the geographic area within a 50-mile radius of the base subject to significant base-related economic impacts. According to the 2002 Economic Resource Impact Statement for MacDill AFB, the total economic impact of MacDill AFB on the EIR was \$5.6 billion with over 133,734 jobs supported. Purchase of local labor, goods, and services to support base operations provides a total annual economic impact of \$1.2 billion. Retiree income provides a total economic impact of \$2.12 billion. The direct impact on local income produced by base expenditures is \$504 million.

3.9 BIOLOGICAL RESOURCES

A detailed description of the biological resources found at MacDill AFB is provided in the *Integrated Natural Resources Management Plan* (INRMP) (USAF, 2001). MacDill's INRMP has been approved by the state and Federal fish and wildlife agencies.

Land use on MacDill AFB includes urban, light industrial, residential, or improved vacant land. The few undeveloped areas within the base boundaries have all experienced some degree of disturbance, such as ditching, clearing, or the encroachment of exotic vegetation.

The 1998 Wetland Delineation Study identified, delineated, and classified approximately 1,195 acres of wetlands on MacDill AFB. Mangrove wetlands are the principal scrub/shrub wetland community on the base. The mangrove community at MacDill AFB has been categorized as

excellent wildlife habitat and is protected by state and local regulations. No wetland communities are present within the proposed Phase VI family housing area.

Wildlife species listed by federal or state agencies as endangered, threatened, or of special concern and known to occur permanently or periodically, or have the potential to occur on the base are shown in Table 3.9 in the Tables section in the back of the text. In 1996, the *Endangered Species Management Plan of MacDill AFB* and the *Biological Survey of MacDill AFB* identified the general locations of protected species at the base. The report does not identify any protected species within the proposed Phase VI family housing area (USAF, 1996). The closest endangered species habitat found near the area is the outer boundary of the 750-foot clear zone of an abandoned bald eagle's nest located approximately 800 feet southwest.

It should be noted that there are approximately 40 large oak trees located in the Phase VI family housing area. The permitted removal of trees located within five feet of the existing buildings would be completed prior to demolition of the building. Large trees that are not within five feet of existing buildings would remain as part of the landscape, and the new housing units would be built around them. Smaller trees would be relocated. The housing plan accounts for the locations of the existing large trees.

The US Fish and Wildlife Service (USFWS) was contacted regarding the presence of biological resources in the location of the Proposed Action. According to USFWS, the Proposed Action would have no effect on these resources (see Appendix C).

3.10 LAND USE

Land use at MacDill AFB includes airfield, industrial, commercial, institutional (educational & medical), residential, recreational, and vacant land. These areas are delineated in *MacDill Air Force Base General Plan* (USAF, 2002). The plan classifies the site proposed for demolition and construction of the new housing units as residential land.

3.11 AIRSPACE AND AIRFIELD OPERATIONS

The airspace region of influence includes the airspace within a 20-nautical-mile radius of MacDill AFB from the ground surface up to 10,000 feet above MSL. Radar monitoring and advisories

within the region are provided by the Tampa Terminal Radar Approach Control (TRACON). There are 13 military and public airports, as well as five private use airports located within or adjacent to the controlled airspace associated with the MacDill AFB region of influence. No special use airspace exists within the region.

MacDill AFB has a bird-aircraft strike hazard plan. It provides guidance for reducing the incidents of bird strikes in and around areas where flying operations occur. The plan establishes provisions to disperse information on specific bird hazards and procedures for reporting hazardous bird activity.

3.12 CULTURAL RESOURCES

Cultural resources are prehistoric and historic sites. These resources consist of districts, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. Historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP) are subject to protection or consideration by a federal agency in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Five archaeological sites are found on MacDill AFB. The closest archaeological prehistoric site is the Gadsden Point site (8Hi49) located approximately one mile south of the Proposed Action site, in the southeastern area of the base near Gadsden Point.

Construction of MacDill AFB began in November 1939, and the base was dedicated in April 1941. Sites and structures related to early missions remain on base today. The housing units proposed for demolition were not constructed during the initial build-up of the base in the 1940's but were constructed in the early 1950's under the Wherry Military Housing Act program, a Department of Defense-wide housing construction program. Because these structures are greater than 50 years old, the Wherry Housing on MacDill AFB were tentatively identified as potentially eligible for the National Register of Historic Places. In July 2003, a *Wherry Housing Historic Building Inventory Evaluation* was completed for all of MacDill's Wherry Housing, which found that all of the housing units lacked sufficient historical associations or physical integrity to be considered eligible for inclusion in the National Register (USAF, 2003).

The State Historic Preservation Office (SHPO) was contacted regarding the presence of historic resources in the location of the Proposed Action. According to SHPO, the Proposed Action would have no effect on historic properties (see Appendix C).

3.13 ENVIRONMENTAL JUSTICE

According to the USEPA, environmental justice is the fair treatment of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Under EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations.

There are no minority or low-income populations in the area of the Proposed Action or the alternatives; thus, there would not be disproportionately high or adverse impacts on such populations. Additionally, no adverse environmental impacts would occur outside MacDill AFB. Therefore, no adverse effects on minority and low-income populations would occur with implementation of the Proposed Action, or from implementation of any of the alternatives, at MacDill AFB.

4.0 ENVIRONMENTAL CONSEQUENCES

The effects of the Proposed Action and alternatives on the affected environment are discussed in this section. Table 4.0 (in the Tables section in the back of the text) is a summary of the potential environmental impacts of the Proposed Action, the Remodel Existing Housing Alternative, and the No Action Alternative.

4.1 AIR QUALITY

4.1.1 Proposed Action

Air quality impacts would occur during construction of the new housing units and demolition of the existing units; however, these air quality impacts would be temporary.

Fugitive dust (particulate matter: suspended and PM₁₀) and construction vehicle exhaust emissions would be generated by (1) equipment traffic; and (2) entrainment of dust particles by the action of the wind on exposed soil surfaces and debris. These emissions would be greater during grading of the new sites and demolition of the existing housing units. Emissions would vary daily. Dust would be generated by equipment travel over temporary roads and would fall rapidly within a short distance from the source.

Pollutants from construction equipment and vehicle engine exhausts include nitrogen oxides (NO_x), carbon monoxide (CO), PM₁₀, and Volatile Organic Compounds (VOCs). Internal combustion engine exhausts would be temporary and, like fugitive dust emissions, would not result in long-term impacts. Pollutant emission estimates are presented in Appendix D and summarized in Table 4.1.1.

Table 4.1.1 Proposed Action Air Emissions at MacDill AFB

Pollutant	Proposed Action Annual Emissions (tpy)	Hillsborough County Emissions Inventory^a (tpy)	Net Change (%)	<i>De minimis</i> Values^c (tpy)	Above/ Below <i>De minimis</i>
CO	20.28	19,272	0.11	100	Below
VOC	7.75	27,703	0.03	100	Below
NO _x	24.13	82,563	0.03	100	Below
SO _x	1.22	NA	--	100	Below
PM ₁₀ ^b	2.09	NA	--	100	Below
Pb	--	53	--	25	--

^a Based on stationary permitted emissions presented in 1997 Ozone Emissions Inventory, EPC.

^b PM₁₀ estimated as 50 percent of the 1990 tpy reported for TSP

^c Source: 40 CFR 93.153, November 30, 1993.

tpy Tons per year

% Percent

4.1.2 Remodel Existing Housing Alternative

The Remodel Existing Housing Alternative would not construct any new or demolish any existing buildings. This alternative would result in some air impacts, primarily increased dust associated with demolition of the interior walls, floors, and ceilings of the buildings selected for remodeling; however, the air impacts associated with remodeling would be significantly less than those associated with the Proposed Action. Dust generated during remodeling would mostly be contained within the building being remodeled and the majority of the dust that escaped the confines of the building would settle to the ground quickly. An increase in vehicle exhaust emissions from the construction vehicles associated with the project would also occur. Although an increase in air emission above baseline conditions would result from the Remodel Existing Housing Alternative, these air impacts would be temporary and minor. Under this alternative, there would be no long-term impacts to air quality.

4.1.3 No Action Alternative

Because the status quo would be maintained, there would be no impacts to air quality under the No Action Alternative.

4.1.4 Cumulative Air Quality Impacts

Other projects are proposed for construction on MacDill AFB during the 24-month period needed to complete the Proposed Action. None of these projects are immediately adjacent to the proposed project site; however, they have been included in the cumulative emissions analysis since they are located on MacDill AFB. Table 4A summarizes the air emissions for each of these projects. Tables 4B through 4E provide the cumulative annual air emissions for each project for FY 2004 through 2007, respectively. As Tables 4B through 4E demonstrate, the cumulative annual emission estimates fall below the *de minimus* level of 100 tons per year for all five pollutants evaluated.

4.2 NOISE

4.2.1 Proposed Action

Noise impacts associated with the Proposed Action would result from construction of new housing units and demolition of the existing housing units. The degree of noise impacts would be

a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Normally, construction activities are carried out in stages and each stage has its own noise characteristics based on the type of construction equipment in use.

The closest sensitive receptors are occupants of adjacent housing units. On average, the adjacent occupied housing units are about 350 feet away from the Proposed Action site. Since demolition and construction activities would be completed during normal business hours (typically 0800 to 1700), occupants at home during the day may experience some noise impacts associated with the Proposed Action.

Noise impacts vary according to the activity occurring on any particular day, and impacts would cease when demolition and construction is completed. Based on a cumulative average construction noise level of approximately 85 dB at 50 feet from the center of the project site, several residential buildings in close proximity to buildings proposed for demolition and construction would be negatively impacted by the Proposed Action, particularly buildings located on Roy Hooe Court and Pitsenbarger Circle in the Heritage Cove housing area located south of the proposed action site, and buildings located in the Bridges Drive housing area located northwest of the Proposed Action site. These impacts would be temporary since demolition of the existing buildings and construction of the new buildings should take approximately 24 months. However, the housing around Bridges Drive would likely be less affected because these housing units are being taken out of service as they are vacated in preparation for demolition as part of Phase VII housing project. In general, the noise impacts associated with construction would be temporary and considered minor.

4.2.2 Remodel Existing Housing Alternative

Noise impacts would occur under this alternative; however, the noise levels would be significantly less than those resulting from the Proposed Action. Construction and demolition activities would primarily occur on the interior of the houses; therefore, the noise would be muffled by the exterior walls of the building. This alternative would require much less site preparation and outside work, resulting in diminished noise levels by comparison with the

Proposed Action. In addition, the noise associated with remodeling would be temporary and considered minor.

4.2.3 No Action Alternative

Under the No Action Alternative no new noise impacts would occur since demolition or construction would not occur.

4.3 WASTES, HAZARDOUS MATERIAL, AND STORED FUEL

The following section describes sanitary wastewater treatment, solid waste collection and disposal, hazardous material and waste management, and stored fuels management.

4.3.1 Proposed Action

A temporary increase in the generation of solid waste would occur during construction and demolition of the identified housing units. Local off-base waste handling services/facilities have sufficient capacity to handle this increased output. There would be a modest decrease in solid waste generation upon completion of the project since the number of personnel living on-base would decrease with the Proposed Action. These personnel no longer living on-base would commute from off-base instead, and would only generate wastes during their decreased time on-base.

Each of the new units would include full bathroom and kitchen facilities. However, there is expected to be a net decrease in wastewater discharge to the base wastewater treatment plant as the number of personnel permanently on-base, as opposed to commuting from off-base, would decrease.

Hazardous wastes/materials, such as paint, adhesives, and solvents, would be on site during construction of the new housing units. All hazardous wastes/materials would be temporarily stored and disposed of per base procedures. All construction related hazardous wastes/materials, including petroleum products, would be removed and disposed of according to base procedures. No impacts from hazardous materials or waste would occur during construction of the new family housing units.

Previous, limited scope surveys of housing units at MacDill AFB have detected lead-based paint and asbestos-containing building materials. A lead-based paint survey and asbestos survey has been completed at two of the housing units proposed for demolition. Since each of the housing units are very similar, for example, they were constructed by the same contractor around the same time frame using identical building materials, the results from the survey for the “sample” housing unit shall be used to manage any hazardous building materials for all of the housing units. All of the asbestos and lead-based paint-containing materials identified during the survey, these materials would be abated prior to demolition of the buildings. Any materials containing asbestos must be removed from the facility by a licensed asbestos contractor in accordance with all Federal, state and local guidelines. An independent environmental consulting firm shall perform environmental monitoring of the work area during the asbestos abatement work.

There are no hazardous waste sites within the area identified for demolition or construction activities. The closest hazardous waste sites to the Proposed Action site are located approximately 1,500 feet south (Site 52), near the base hospital, approximately 1,500 feet east (SWMU-35), next to Building 886, and approximately 1,900 feet southwest (Site 48), located west of the Phase V housing area (Figure 4-1).

Contact with contaminated media is not likely, but if it is encountered during construction or demolition, the material would be managed in accordance with hazardous waste clean-up guidelines. These guidelines include the development of a site-specific Health & Safety Plan by the construction/demolition contractor and the use of approved personal protective equipment (PPE) and clothing by all personnel working within the contaminated portions of the site. Following hazardous waste clean-up guidelines would insure the protection of worker health and safety and the proper management of contaminated material; consequently, if contaminated media is encountered, the proposed construction activities should not represent a significant impact.

The Proposed Action would have no impact on stored fuels management and environmental compliance at the base.

4.3.2 Remodel Existing Housing Alternative

The impact under this alternative would be similar to the Proposed Action; and would also require the proper storage and disposal of hazardous materials. The Remodel Existing Housing Alternative would have no impact on stored fuels and environmental compliance at MacDill AFB.

4.3.3 No Action Alternative

Under the No Action Alternative, no impacts to wastes or hazardous material or stored fuels would occur since there would be no change in the existing conditions.

4.4 WATER RESOURCES

4.4.1 Proposed Action

A small amount of soil erosion would occur during construction and demolition activities since the soil surface would be exposed and disturbed at work locations during the project. Soil erosion in areas that are disturbed would be controlled by implementation of a sediment and erosion control plan, including implementation of Best Management Practices (BMPs). This EA has been prepared under the assumption that the construction and demolition sites would, at a minimum, be covered with a clean layer of graded fill. Silt fencing would be installed around the perimeter of the proposed construction and demolition sites to control erosion caused by storm water runoff.

Upon completion, storm water would be routed to newly-constructed dry retention areas to percolate into the ground, as opposed to directly discharging to Hillsborough Bay. The reintroduction of storm water into the ground would reduce sediments discharging to the bay. As such, there would be minor beneficial long-term impacts to water resources once the project is complete.

Under the Proposed Action, there would be no direct or indirect discharges to groundwater. No negative impacts to groundwater would occur with implementation of the Proposed Action. Potable water would be required for all of the new housing units; however, demolition of the old

units would remove potable water users from the base system, resulting in a negligible change in water use.

4.4.2 Remodel Existing Housing Alternative

Under this alternative no impacts to water resources would occur; however, storm water would continue to discharge directly to the bay.

4.4.3 No Action Alternative

Under the No Action alternative, there would be no change to the current conditions and no impact to water resources would occur with implementation of this alternative.

4.5 FLOODPLAINS

In accordance with the requirements of EO 11988, the Air Force must demonstrate that there is no practicable alternative to carrying out the Proposed Action within the coastal floodplain. No other practicable sites were identified during the initial siting phase, and potential siting locations were limited due to the nature of the project.

4.5.1 Proposed Action

The proposed new housing units would be located entirely in the 100-year floodplain. All of the new housing units would be constructed on fill material to raise the building foundations above the 100-year coastal floodplain elevation (11 ft MSL). Elevating the new buildings above the floodplain would reduce the risk of flood loss and dramatically reduce the impacts from floods on human safety, health and welfare. Construction of the new housing units would have a minor positive impact on the floodplain, since there would be a net decrease in the amount of impervious surface within the floodplain. Additionally, the construction of dry storm water retention areas would collect storm water runoff and direct it back into the ground, instead of direct discharges to Hillsborough Bay.

4.5.2 Remodel Existing Housing Alternative

No impacts to the floodplain would occur under this alternative since no new houses would be constructed. Remodeling of the existing units would not involve elevating the housing units, which lie at an elevation of between 5 and 10 feet MSL. Consequently, upon completion of

remodeling activities, the housing units would still be within the 100-year floodplain and subject to flooding, placing occupants and personal property at increased risk.

4.5.3 No Action Alternative

There would be no changes to existing conditions with implementation of the No Action Alternative and there would be no impacts to the floodplain.

4.6 TRANSPORTATION SYSTEMS

4.6.1 Proposed Action

There would be a temporary negative impact from construction vehicles during construction of the new housing units and demolition of the existing housing. The construction impacts would be temporary, and the level of service of base roads would not decline. No net impacts to transportation would result from the Proposed Action. The number of housing units on-base would decrease, however, the number of personnel on-base would not change significantly since personnel no longer living on-base would commute to the base to work, and would therefore continue to utilize the base transportation systems.

4.6.2 Remodel Existing Housing Alternative

The impacts on transportation for this alternative would be similar to those identified for the Proposed Action. Consequently, no long-term impacts on transportation would be incurred with implementation of this alternative.

4.6.3 No Action Alternative

No impacts on transportation would be incurred under the No Action alternative.

4.7 SAFETY AND OCCUPATIONAL HEALTH

4.7.1 Proposed Action

The proposed demolition and construction activities for the project would pose safety hazards to the workers similar to those associated with typical industrial construction projects, such as falls, slips, heat stress, and machinery injuries. Construction would not involve any unique hazards and all construction methods would comply with Occupational Safety and Health Administration

(OSHA) requirements to ensure the protection of workers and the general public during construction. Vigilant but not controlling governmental oversight of contractor activities would help assure OSHA compliance.

A survey for lead-based paint and asbestos containing building materials have been previously performed at two of the housing units proposed for demolition; and several ACMs and LBP has been identified. Since all of the 22 buildings (154 units) proposed for demolition are essentially the same, the results from the “sample” building shall be used for the other buildings. Upon initiation of the Proposed Action, the demolition contractor shall hire a qualified environmental abatement subcontractor to remove and dispose of the asbestos- containing building material and lead-based paint. Any additional suspect materials noted in other structures, but not present in the “sample” structures shall be tested prior to demolition. The same environmental firm shall perform environmental monitoring during the abatement work in accordance with Air Force, USEPA, and other applicable environmental regulations. All waste disposal manifests shall be turned over to the government upon completion of the demolition work.

4.7.2 Remodel Existing Housing Alternative

The safety hazards posed under this alternative would be similar to those identified in the Proposed Action. Remodeling activities in the existing houses would have impacts similar to demolition of the buildings. These materials would be surveyed and managed as described in the Proposed Action. This alternative would have a long-term positive impact on health and safety by removing hazardous materials from the housing units.

4.7.3 No Action Alternative

No impacts on safety and occupational health would be incurred under the No Action Alternative.

4.8 SOCIOECONOMIC RESOURCES

4.8.1 Proposed Action

The Proposed Action would cost approximately \$21.7 million to complete, based on 2003 cost estimates. This would equal approximately 4.4 percent of the nearly \$494 million annual expenditures that MacDill AFB provides to the local economy, and would constitute a moderate

beneficial impact. The Proposed Action would also have a minor beneficial impact on the work force in the region during the construction period.

4.8.2 Remodel Existing Housing Alternative

Remodeling the existing housing units is estimated to cost approximately \$16.24 million. The Remodel Existing Housing Alternative represents approximately 3.3 percent of the nearly \$494 million annual expenditures that MacDill AFB provides to the local economy, and would therefore constitute a minor beneficial impact.

4.8.3 No Action Alternative

Under the No Action Alternative, no impacts to socioeconomic resources would occur. Costs to the Air Force, for as-needed repairs and maintenance would occur (and increase over time); however, funding for such repairs would come from the overall annual expenditures at the base, and to the financial detriment of other projects.

4.9 OTHER ITEMS WITH NO POTENTIAL IMPACTS

In addition to the resources discussed in the previous sections, the potential impacts to biological resources, land use, airspace and airfield operations, cultural resources, environmental justice, and geology and soils were evaluated. Based upon this evaluation, there are no likely potential impacts to any of these resources resulting from the implementation of the Proposed Action or any of the considered alternatives.

4.10 CUMULATIVE IMPACTS

As indicated in Table 4.0, the Proposed Action, when examining it as a portion of the total proposed and/or ongoing construction projects on MacDill AFB, would result in minor and beneficial cumulative impacts to water resources, floodplains, and socioeconomics, due to a reduction of sediments discharging to Hillsborough Bay, and increase in the amount of storm water entering retention ponds, and an approximately 4.4 percent increase in the annual expenditures MacDill AFB provides to the local economy.

When examining it as a portion of the total proposed and/or ongoing construction projects on MacDill AFB, the Proposed Action would have no significant cumulative impacts to air quality, noise, wastes, hazardous materials, stored fuels, transportation, safety and occupational health,

biological resources, land use, airspace and airfield operations, cultural resources, environmental justice, or geology and soils, as outlined in Table 4.0 and Table 4A.

5.0 CONCLUSIONS

Based upon the analyses presented in this environmental assessment, it appears the Proposed Action alternative would not have a significant impact upon the quality of the human environment. The minor negative environmental effects would certainly be outweighed by the long-term benefit of new housing on base, and the project would have a positive effect on morale at MacDill AFB, which, in turn, can improve productivity.

6.0 MANAGEMENT REQUIREMENTS

6.1 AIR QUALITY

Use reasonable precautions to control the emissions of unconfined particulate matter during construction activities in accordance with Chapter 62-296, Florida Administrative Code. Ensure that all hazardous materials used during construction comply with the MacDill AFB Hazardous Materials Management Program's requirements for low volatile organic compound content.

6.2 WATER RESOURCES

Submit appropriate applications to permit storm water retention areas and NPDES construction for all of the proposed roadways and parking lots. Ensure BMPs, such as silt screens and placement of hay bales, are employed during construction to prevent erosion and storm water violations during all construction activities. Ensure that the new construction complies with all applicable water and energy conservation requirements in Executive Order 13123, *Greening the Government Through Efficient Energy Management*.

6.3 HAZARDOUS MATERIALS/WASTES

Ensure hazardous materials are approved and tracked through MacDill AFB's Hazardous Materials Management Program. Coordinate characterization and disposal of any hazardous or special waste with MacDill AFB's Environmental Compliance Program. Coordinate with MacDill AFB's Pollution Prevention Program to ensure recycling of demolition wastes, if

possible. Ensure that any soil removed from the site is tested for contaminants of concern and, if contaminated, properly disposed.

6.4 BIOLOGICAL RESOURCES

Ensure that any ground surface area disturbed during construction is re-seeded or re-vegetated with native flora.

6.5 SAFETY AND OCCUPATIONAL HEALTH

Ensure construction activities comply with OSHA standards or more stringent standards if applicable. Ensure that a site specific health and safety plan is prepared prior to initiating construction and demolition at the proposed Phase VI housing area and ensure that all workers completing excavation or dirt moving activities in this area have 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training and the annual 8-hour refresher course.

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FIGURES

**Proposed Phase VI Military
Family Housing Location**



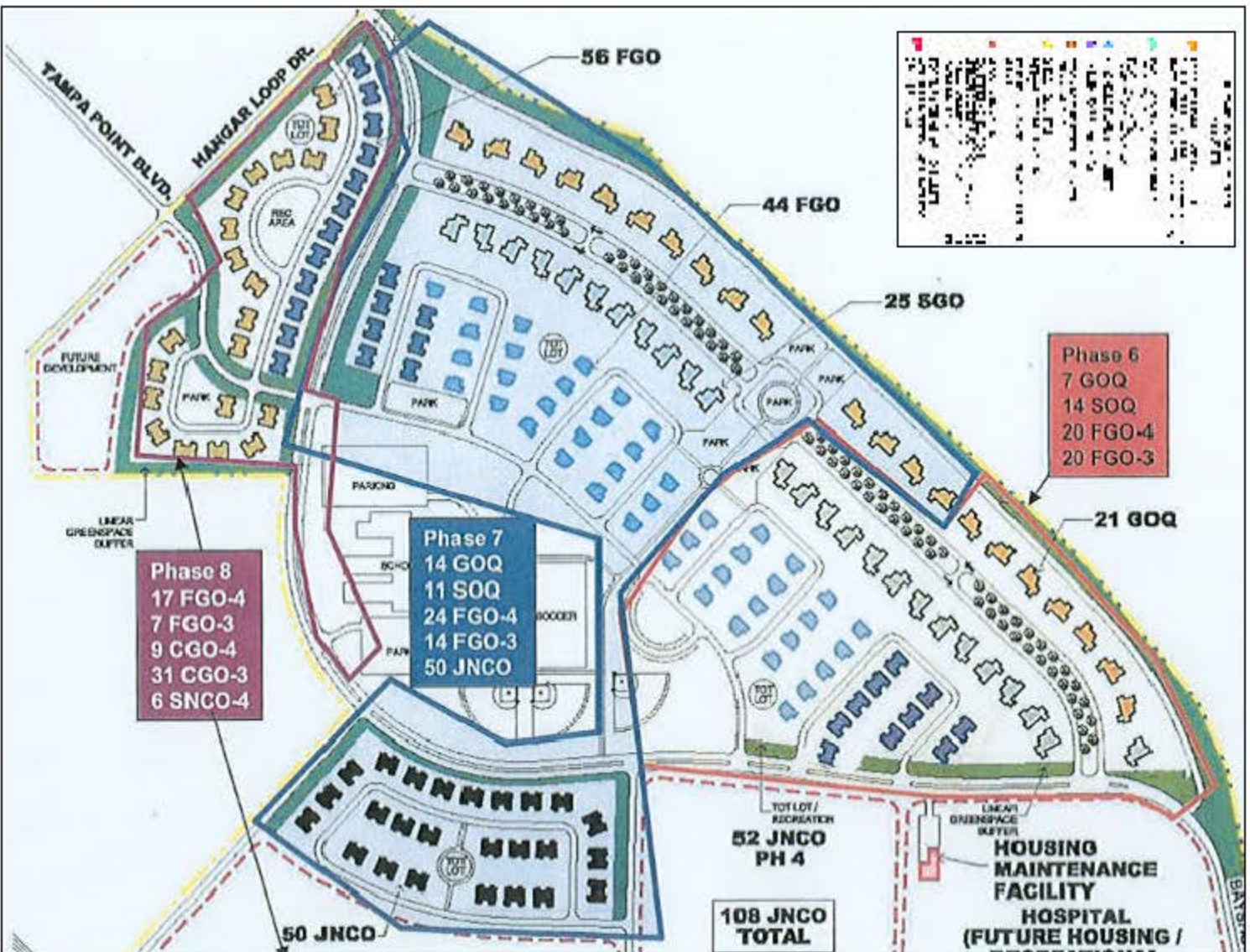
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Reference:
www.Terraserver.Microsoft.com

Prepared/Date: JT 08/12/04
Checked/Date:

**Construction of
Military Family Housing - Phase VI
MacDill Air Force Base**

**Project Location and Vicinity Map
Figure 1-1**



Construction of
 Military Family Housing - Phase VI
 MacDill Air Force Base

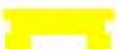
Military Family Housing Master Plan
 Figure 2-1



PHASE VI BUILDINGS



PHASE V BUILDINGS



OPERATION & MAINTENANCE BUILDINGS



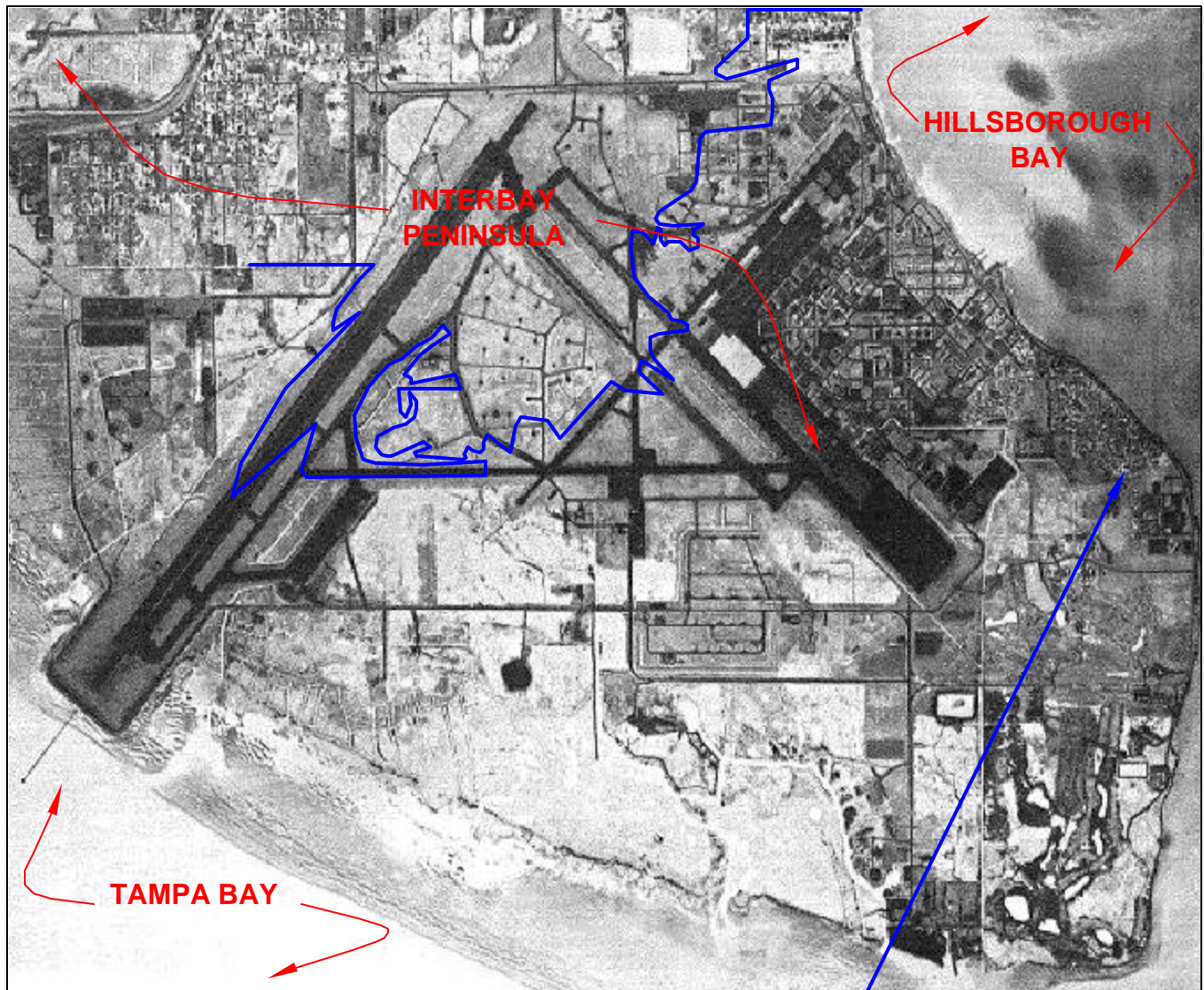
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Reference:
www.Terraserver.Microsoft.com

Prepared/Data: JT 08/12/04
Checked/Data:

**Construction of
Military Family Housing - Phase VI
MacDill Air Force Base**

**Demolition of Existing
Military Family Housing - Site Plan
Figure 2-2**



**Existing and Proposed
Military Family Housing
Location**



0 1500 3000 4500

APPROXIMATE SCALE IN FEET

LEGEND

— 100 YEAR FLOOD PLAIN (ALL AREAS SOUTH OF LINE)

Reference:

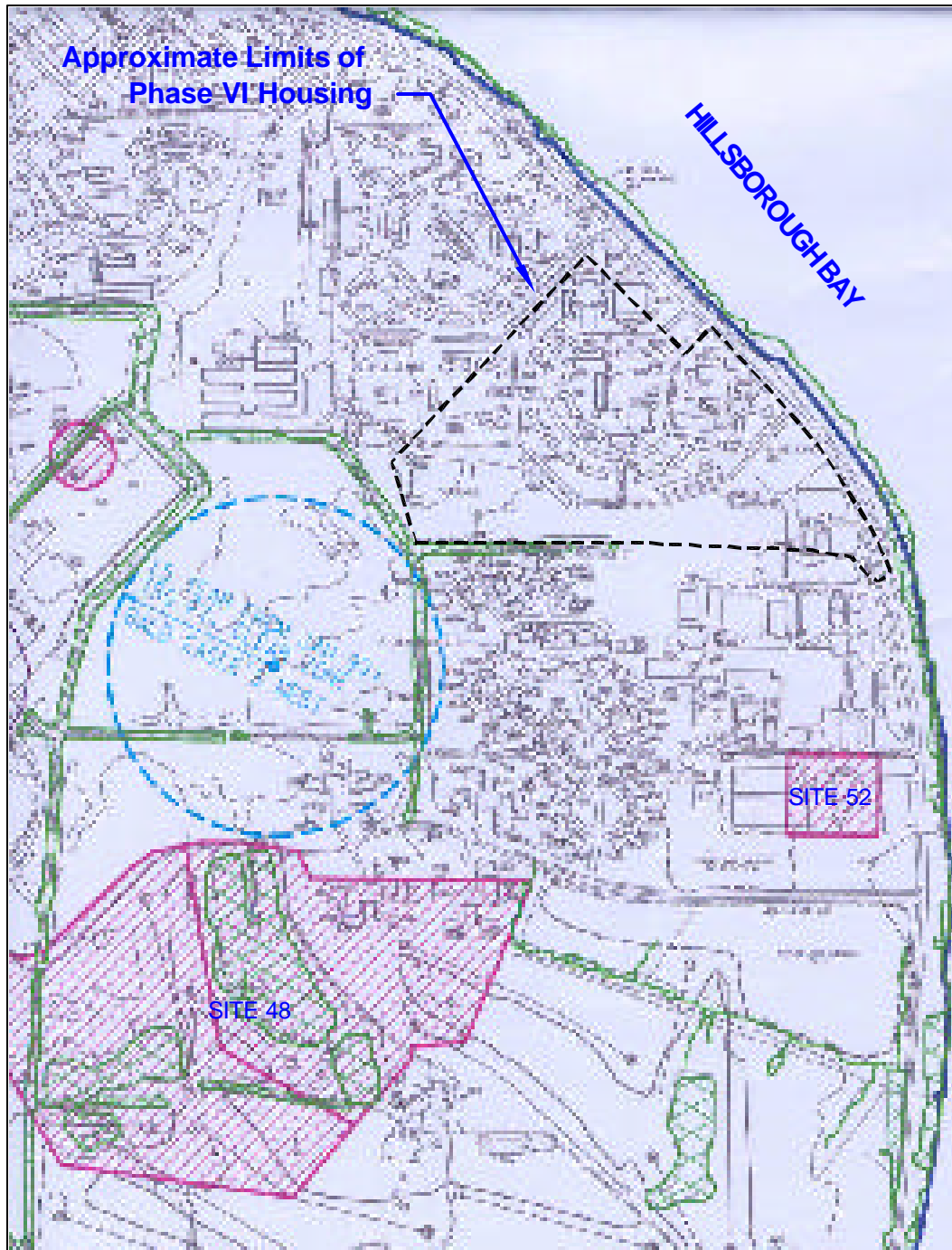
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Dated 08/18/02

Prepared/Date: JT 08/12/04

Checked/Date:

**Construction of
Military Family Housing - Phase VI
MacDill Air Force Base**

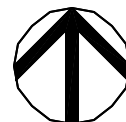
**100-Year Floodplain Map
Figure 3-1**



LEGEND

	IRP SITES
	EXPLOSIVE CLEAR ZONE
	NOISE CONTOUR
	NATURAL RESOURCES
	FORCE PROTECTION
	WETLANDS
	100 YEAR FLOODPLAIN

Reference:
Composite Installation Constraints and Opportunities
MacDILL AFB
Drawing CADD name: D-05-01.dgn
Sheet No. D-05, Date: 24 JUL 03



NOT TO SCALE

Prepared/Date: JT 08/12/04
Checked/Date:

Construction of
Military Family Housing - Phase VI
MacDill Air Force Base

Environmental Constraints In Vicinity
of Existing and Proposed
Military Family Housing
Figure 4-1

TABLES

Table 3.9 Summary of Protected Species Identified at MacDill AFB
Replace Military Family Housing - Phase VI
MacDill AFB, Florida

Common name	Scientific Name	Status	
		Federal	State
Reptile/Amphibians			
American alligator	<i>Alligator mississippiensis</i>	T (SA)	SSC
Atlantic loggerhead turtle	<i>Caretta caretta caretta</i>	T	T
Atlantic green turtle	<i>Chelonia mydas mydas</i>	E	E
Gopher tortoise	<i>Gopherus polyphemus</i>	-	SSC
Gopher frog	<i>Rana capito</i>	C2	SSC
Florida pine snake	<i>Pituophis melanoleucus mugitus</i>	C2	SSC
Short-tailed snake	<i>Stilosoma extenuatum</i>	C2	T
Birds			
Roseate spoonbill	<i>Ajaia ajaja</i>	-	SSC
Limpkin	<i>Aramus guarana</i>	-	SSC
Burrowing owl	<i>Athene cunicularia</i>	-	SSC
Piping plover	<i>Charadrius melodus</i>	T	T
Southeastern snowy plover	<i>Charadrius alexandrinus tenuirostris</i>	C2	T
Little blue heron	<i>Egretta caerulea</i>	C2	SSC
Reddish egret	<i>Egretta rufescens</i>	C2	SSC
Snowy egret	<i>Egretta thula</i>	-	SSC
Tricolored heron	<i>Egretta tricolor</i>	-	SSC
Peregrine falcon	<i>Falco peregrinus tundris</i>	T	E
Southeast American kestrel	<i>Falco sparverius paulus</i>	C2	E
Florida sandhill crane	<i>Grus canadensis pratensis</i>	-	T
American oystercatcher	<i>Haematopus palliatus</i>	-	SSC
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	T
Wood stork	<i>Mycteria americana</i>	E	E
Brown pelican	<i>Pelecanus occidentalis</i>	-	SSC
Least tern	<i>Sterna antillarum</i>	-	T
Roseate tern	<i>Sterna dougalii</i>	T	T
Bachman's warbler	<i>Vermivora bachmanii</i>	E	E
Black skimmer	<i>Rynchops niger</i>	-	SSC
White ibis	<i>Eudocimus albus</i>	-	SSC
Mammals			
Florida mouse	<i>Podomys floridanus</i>	C2	SSC
West Indian (FL) manatee	<i>Trichechus manatus</i>	E	E
Fish			
Common snook	<i>Centropomus undecimalis</i>	-	SSC
Plants			
No State or Federally listed plant species are known to exist on MacDill AFB		-	-

T=Threatened, T(SA)=Threatened/Similarity of Appearance, E= Endangered, SSC= Species of Special Concern, C2=Candidate for listing

Source: Endangered Species Management Plan, MacDill AFB, Florida, 1996

Table 4.0 Comparison of Environmental Consequences
Replace Military Family Housing - Phase VI
MacDill AFB, Florida

Environmental Resources	Alternative A – Proposed Action	Alternative B – Remodel Existing Housing	Alternative C – No Action
Air Quality	Short-term – <i>Minor Adverse</i> Long-term – No Impact Cumulative – No Impact	Short-term – <i>Minor Adverse</i> Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Noise	Short-term – <i>Minor Adverse</i> Long-term – No Impact Cumulative – No Impact	Short-term – <i>Minor Adverse</i> Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Wastes, Hazardous Materials, and Stored Fuels	Short-term – <i>Minor Adverse</i> Long-term – <i>Minor Beneficial</i> Cumulative – No Impact	Short-term – <i>Minor Adverse</i> Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Water Resources	Short-term – No Impact Long-term – <i>Minor Beneficial</i> Cumulative – <i>Minor Beneficial</i>	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Floodplains	Short-term – No Impact Long-term – <i>Minor Beneficial</i> Cumulative – <i>Minor Beneficial</i>	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Transportation Systems	Short-term – <i>Minor Adverse</i> Long-term – No Impact Cumulative – No Impact	Short-term – <i>Minor Adverse</i> Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Safety and Occupational Health	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – <i>Minor Beneficial</i> Cumulative – <i>Minor Beneficial</i>	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Socioeconomic Resources	Short-term – <i>Minor Beneficial</i> Long-term – <i>Minor Beneficial</i> Cumulative – <i>Minor Beneficial</i>	Short-term – <i>Minor Beneficial</i> Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Biological Resources	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Land Use	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Airspace and Airfield Operations	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Cultural Resources	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Environmental Justice	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Geology and Soils	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact
Indirect and Cumulative Impacts	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact	Short-term – No Impact Long-term – No Impact Cumulative – No Impact

TABLE 4A
Total Air Emissions for Projects at MacDill AFB
Replace Military Family Housing - Phase VI

Pollutants	Military Family Housing - Phase VI	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	Control Tower/ Crash Rescue	USCENTCOM	Naval Reserve Center	USSOCOM	Military Family Housing - Phase V	Env. Equip Enclosure	Vet Clinic	Military Family Housing - Phase VII	Military Family Housing - Phase VIII	Project Totals	Hills City Emissions 1997	Net Change	De minimis	Above/Below De minimis
CO	20.28	23.72	1.40	5.39	19.52	6.77	17.03	34.85	0.84	0.81	20.28	20.28	171.17	15,272	0.89%	100	NA
VOC	7.75	8.88	1.01	2.81	7.40	3.40	6.58	11.31	0.77	0.61	7.75	7.75	66.02	25,703	0.24%	100	NA
NO _x	24.13	28.07	6.45	6.09	21.71	7.59	19.44	37.85	0.92	0.94	24.13	24.13	201.45	82,563	0.24%	100	NA
SO _x	1.22	1.41	0.43	0.3	1.06	0.37	0.96	1.85	0.04	0.05	1.22	1.22	10.13	NA		100	NA
PM ₁₀	2.09	2.41	1.13	0.49	1.7	0.60	1.58	2.93	0.07	0.08	2.09	2.09	17.26	NA		100	NA
Pb													0	53		25	NA
Estimated Start/End Date	4/2005 to 10/2006	12/2006 to 12/2007	1/2008 to 6/2008	3/2003 to 9/2004	7/2005 to 6/2007	4/2003 to 10/2004	7/2005 to 12/2006	7/2004 to 12/2005	4/2004 to 6/2005	1/2004 to 6/2005	4/2006 to 10/2007	4/2007 to 10/2008					

**Note: All values in tons per year unless otherwise noted.
 Net change = Project totals / Hillsborough County emissions

Above/Below De minimis = Project totals above or below de minimis
 NA = not available/not applicable

YEAR 2004 THROUGH 2007 EMISSIONS WERE ESTIMATED BY TAKING AN APPROPRIATE PERCENTAGE OF THE TOTAL EMISSIONS DETERMINED ABOVE.
 SEE TABLES 4B through 4F BELOW
 Military Family Housing Phases VII and VIII Air Emissions have not been calculated, but were assumed to be similar to Phase VI totals.

TABLE 4B
Emissions for Year 2004

	Military Family Housing - Phase VI	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	Control Tower/ Crash Rescue	USCENTCOM	Naval Reserve Center	USSOCOM	Military Family Housing - Phase V	Env. Equip Enclosure	Vet Clinic	Military Family Housing - Phase VII	Military Family Housing - Phase VIII	2004 Project Totals	De minimis	Above/Below De minimis
Estimated % of Time During 2004 That Project Would Be Active	0%	0%	0%	75%	0%	0%	0%	42%	66%	100%	0%	0%			
Pollutants															
CO	0.00	0.00	0.00	4.04	0.00	0.00	0.00	14.64	0.55	0.81	0.00	0.00	20.04	100	Below
VOC	0.00	0.00	0.00	2.11	0.00	0.00	0.00	4.75	0.51	0.61	0.00	0.00	7.98	100	Below
NO _x	0.00	0.00	0.00	4.57	0.00	0.00	0.00	15.90	0.61	0.94	0.00	0.00	22.01	100	Below
SO _x	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.78	0.03	0.05	0.00	0.00	1.08	100	Below
PM ₁₀	0.00	0.00	0.00	0.37	0.00	0.00	0.00	1.23	0.05	0.08	0.00	0.00	1.72	100	Below
Pb													0	25	Below

TABLE 4C
Emissions for Year 2005

	Military Family Housing - Phase VI	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	Control Tower/ Crash Rescue	USCENTCOM	Naval Reserve Center	USSOCOM	Military Family Housing - Phase V	Env. Equip Enclosure	Vet Clinic	Military Family Housing - Phase VII	Military Family Housing - Phase VIII	2005 Project Totals	De minimis	Above/Below De minimis
Estimated % of Time During 2004 That Project Would Be Active	67%	0%	0%	0%	25%	0%	67%	100%	50%	50%	0%	0%			
Pollutants															
CO	13.59	0.00	0.00	0.00	4.88	0.00	11.41	34.85	0.42	0.41	0.00	0.00	65.55	100	Below
VOC	5.19	0.00	0.00	0.00	1.85	0.00	4.41	11.31	0.39	0.31	0.00	0.00	23.45	100	Below
NO _x	16.17	0.00	0.00	0.00	5.43	0.00	13.02	37.85	0.46	0.47	0.00	0.00	73.40	100	Below
SO _x	0.82	0.00	0.00	0.00	0.27	0.00	0.64	1.85	0.02	0.03	0.00	0.00	3.62	100	Below
PM ₁₀	1.40	0.00	0.00	0.00	0.43	0.00	1.06	2.93	0.04	0.04	0.00	0.00	5.89	100	Below
Pb													0	25	Below

TABLE 4D
Emissions for Year 2006

	<i>Military Family Housing - Phase VI</i>	<i>Primary Care Clinic (construction)</i>	<i>Medical Treatment Facility (demolition)</i>	<i>Control Tower/ Crash Rescue</i>	<i>USCENTCOM</i>	<i>Naval Reserve Center</i>	<i>USSOCOM</i>	<i>Military Family Housing - Phase V</i>	<i>Env. Equip Enclosure</i>	<i>Vet Clinic</i>	<i>Military Family Housing - Phase VII</i>	<i>Military Family Housing - Phase VIII</i>	<i>2006 Project Totals</i>	<i>De minimis</i>	<i>Above/Below De minimis</i>
Estimated % of Time During 2006 That Project Would Be Active	83%	8%	0%	0%	100%	0%	100%	0%	0%	0%	67%	0%			
Pollutants															
CO	16.83	1.90	0.00	0.00	19.52	0.00	17.03	0.00	0.00	0.00	13.59	0.00	68.87	100	Below
VOC	6.43	0.71	0.00	0.00	7.40	0.00	6.58	0.00	0.00	0.00	5.19	0.00	26.32	100	Below
NO _x	20.03	2.25	0.00	0.00	21.71	0.00	19.44	0.00	0.00	0.00	16.17	0.00	79.59	100	Below
SO _x	1.01	0.11	0.00	0.00	1.06	0.00	0.96	0.00	0.00	0.00	0.82	0.00	3.96	100	Below
PM ₁₀	1.73	0.19	0.00	0.00	1.70	0.00	1.58	0.00	0.00	0.00	1.40	0.00	6.61	100	Below
Pb													0	25	Below

TABLE 4E
Emissions for Year 2007

	<i>Military Family Housing - Phase VI</i>	<i>Primary Care Clinic (construction)</i>	<i>Medical Treatment Facility (demolition)</i>	<i>Control Tower/ Crash Rescue</i>	<i>USCENTCOM</i>	<i>Naval Reserve Center</i>	<i>USSOCOM</i>	<i>Military Family Housing - Phase V</i>	<i>Env. Equip Enclosure</i>	<i>Vet Clinic</i>	<i>Military Family Housing - Phase VII</i>	<i>Military Family Housing - Phase VIII</i>	<i>2007 Project Totals</i>	<i>De minimis</i>	<i>Above/Below De minimis</i>
Estimated % of Time During 2007 That Project Would Be Active	0%	100%	0%	0%	50%	0%	0%	0%	0%	0%	83%	67%			
Pollutants															
CO	0.00	23.72	0.00	0.00	9.76	0.00	0.00	0.00	0.00	0.00	16.83	13.59	63.90	100	Below
VOC	6.43	0.71	0.00	0.00	7.40	0.00	6.58	0.00	0.00	0.00	5.19	0.00	26.32	100	Below
NO _x	20.03	2.25	0.00	0.00	21.71	0.00	19.44	0.00	0.00	0.00	16.17	0.00	79.59	100	Below
SO _x	0.00	1.41	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	1.01	0.82	3.77	100	Below
PM ₁₀	0.00	2.41	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.00	1.73	1.40	6.40	100	Below
Pb													0	25	Below

APPENDIX A

AIR FORCE FORM 813

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol
RCS: 06304-12

INSTRUCTIONS: Section I to be completed by Proponent. Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

SECTION I - PROPONENT INFORMATION

1. TO (Environmental Planning Function)	2. FROM (Proponent Organization and functional address symbol)	2a. TELEPHONE NO.
6 CES/CEV	6 CES/CEPP	(813) 828-2543 DSN 968-2543

3. TITLE OF PROPOSED ACTION

REPLACE FAMILY HOUSING PHASES 6 (project NVZR023701)

4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)

Continued on attachment.

5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action)

Continued on attachment.

6. PROPONENT APPROVAL (Name and Grade)	6a. SIGNATURE	6b. DATE
STEPHAN C. Boyd	<i>Stephan C Boyd</i>	2 Mar 04

SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY (Check appropriate box and describe potential environmental effects including cumulative effects) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)

	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)		X		
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)		X		
9. WATER RESOURCES (Quality, quantity, source, etc.)		X		
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety, quantity distance, bird/wildlife aircraft hazard, etc.)		X		
11. HAZARDOUS MATERIALS WASTE (Use/storage/generation, solid waste, etc.)		X		
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)		X		
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)		X		
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, installation Restoration Program, seismicity, etc.)		X		
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)		X		
16. OTHER (Potential impacts not addressed above.)				

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ OR
X	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS

MacDill AFB is located in a maintenance area for the following criteria pollutants: Ozone. Direct emissions from construction and indirect emissions from visiting traffic and/or follow-on operations, when totaled are less than the de minimus amounts in 40 CFR 93.153; therefore, a conformity determination is not required.

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade): DONALD J. HALPIN Colonel, USAF Vice Commander, 6th Air Mobility Wing	19 a. SIGNATURE <i>Don Halpin</i>	19 b. DATE 24 Oct 04
--	--------------------------------------	-------------------------

4.0 PURPOSE AND NEED FOR ACTION:

Existing housing units are over 50 years old and show the effects of age and continuous heavy use. They have had no major upgrades since construction and do not meet the needs of today's families. Some of the quantifiable deficiencies with the existing housing are described below.

Existing houses are well below the authorized net square footage area. Roofs, walls, foundations, and exterior pavements require major repair or replacement. Plumbing and electrical systems are antiquated and do not meet current standards for efficiency or safety. Lack of sufficient parking spaces for occupants creates excessive congestion and safety hazards. Housing interiors are outdated and inadequate by any modern criteria. Bedrooms are small and lack sufficient closet space. Bathrooms are small; fixtures are outdated, in poor condition, and require regular maintenance. Kitchens have inadequate storage and counter space; cabinets are old and unsightly; counter tops and sinks are badly worn. Flooring throughout the units is worn and some contain asbestos. Utility systems require excessive maintenance and repair. Housing density is excessive, creating a noisy, chaotic living environment.

Implementation of the proposed housing construction projects are required to provide comfortable, safe, and efficient replacement housing for military members and their dependents stationed at MacDill AFB.

5.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

5.1 Proposed Action – Construction/Replacement of Family Housing Units. The FY05 housing project would demolish the 152 Wherry Housing units and two multi-family garage buildings on MacDill AFB and construct 61 replacement units on base. Additional aspects of the project include the replacement/upgrade of utilities, roads, and landscaping and the construction of recreational areas.

5.1.1 All units will meet "whole house" standards and are programmed in accordance with AFI 32-6002, Family Housing Planning, Programming, Design, and Construction. All replacement housing will provide a safe, comfortable, and appealing living environment comparable to the off-base civilian community. Amenities in new units include: kitchen appliances, carports and/or garages, HVAC, carpet, patios and privacy fencing. The replacement housing will provide a modern kitchen, living room, dining room and bath configuration, with interior and exterior storage and vehicle protection. Off-street parking will be provided for a second vehicle. The basic neighborhood support infrastructure will be upgraded to meet modern housing needs. Neighborhood enhancements will include landscaping, playgrounds and recreation areas. Due to MacDill's location with the 100-year floodplain, the houses would be designed and constructed to withstand severe storms (hurricanes) and tidal surges.

5.1.2 Demolition of 152 existing units would remediate the asbestos found in those units reducing the potential for exposure of base personnel to hazardous materials.

5.2 Alternative Action: Renovation Alternative - This alternative would extensively renovate, approximately 152 existing housing units. The housing must be upgraded to meet current life safety codes and to provide a comfortable and appealing environment comparable to the off-base civilian community. Renovated housing will provide a modern kitchen, living room, family room, bedroom and bath configuration, with ample interior and exterior storage. Living units will be expanded to meet current space authorizations. Additional off-street parking will be

Replace Military Family Housing Phase 1

provided where deficient. Neighborhood improvements are required and will include landscaping, playgrounds and recreational areas. Spacing of units prevents construction of individual carports or garages. Bathrooms also require enlargement and replacement of outdated fixtures. The electrical systems do not meet modern construction codes. Ground fault interrupter (GFI) protection is lacking in the bath, kitchen and exterior circuits. Most units require roof repair or replacement. Windows and doors require replacement. Flooring is old and worn, and contains asbestos. Interior woodwork trim contains lead-based paint. If there are no improvements/replacements, Air Force members and their families will continue to live in extremely outdated, unsuitable, and unsatisfactory housing. The housing will continue to deteriorate with age, resulting in increased operations, maintenance, and repair costs. Low morale and retention problems can be expected if such conditions are permitted to continue. Renovation/repairs will be accomplished over an 18-month period. Current residents will have to move off-base during the renovation period. This project meets the criteria/scope specified in Par II of Military Handbook 1190, "Facility Planning and Design Guide."

5.3 Alternative Action: Private Sector Development - This alternative uses private sector resources and knowledge to provide facilities for the Air Force. Private Sector Development is only feasible in cases where direct payment or guarantees for payment are provided by the Air Force. This is not a feasible alternative since the Air Force does not guarantee payment for military housing.

5.4 Alternative Action: Government Leasing - This alternative involves direct, long-term leasing or guaranteed rental by the Air Force of suitable, privately developed housing on or off base. Government leasing is not a feasible alternative as a result of the 2002 MacDill AFB Family Housing Master Plan, which concluded that due to location, life cycle cost and leverage, privatization is not a viable alternative for MacDill AFB.

5.5 No Action Alternative - Do not construct new housing units. Air Force members and their families would continue to live in small, outdated and unsatisfactory housing. The units would deteriorate further, resulting in escalating and unacceptable maintenance and repair costs as well as inconveniencing the occupants. Without implementation of a housing replacement initiative, repairs would continue in a costly, piecemeal fashion with little or no improvement in occupant quality of life. These deficiencies would continue to adversely affect the morale of all personnel and their family members assigned to the base. Implementation of this alternative would indirectly or directly affect the retention of Air Force service personnel.



PROPOSED BUILDINGS FOR DEMOLITION



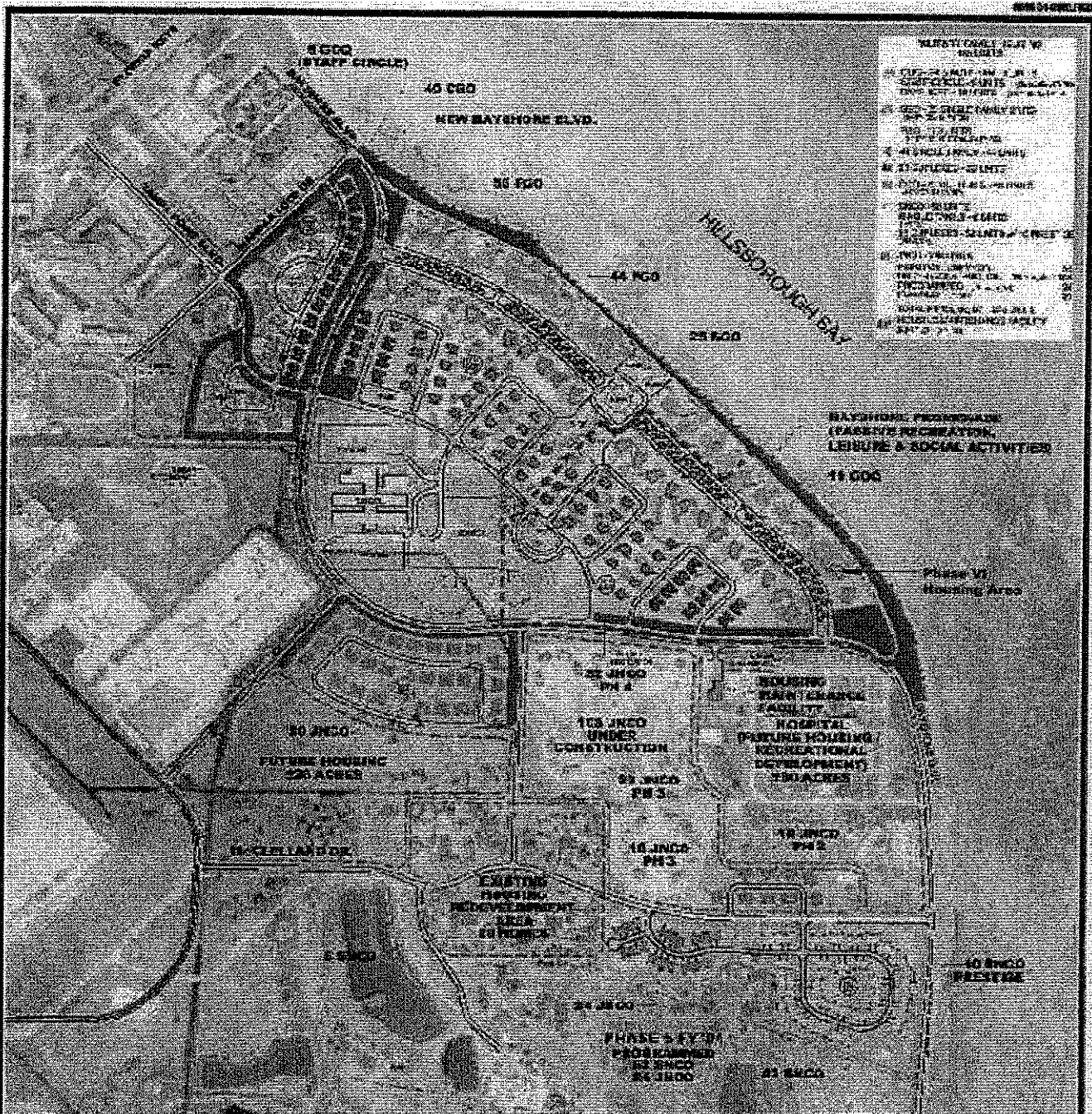
NOT TO SCALE

Reference:
www.Terraserver.Microsoft.com

Prepared/Date: JT 07/12/04
Checked/Date:

Construction of
Military Family Housing - Phase VI
MacDill Air Force Base

Demolition of Existing
Military Family Housing - Site Plan
Figure 1



Reference:
Military Housing Concept Master Plan 3-12-04
BASE MAP WITH AERIAL 11X17



NOT TO SCALE

Prepared/Date: JT 07/13/04
Checked/Date:

Construction of
Military Family Housing - Phase VI
MacDill Air Force Base

Military Family Housing Master Plan
Figure 2

APPENDIX B

CONSISTENCY STATEMENT

APPENDIX B CONSISTENCY STATEMENT

This consistency statement will examine the potential environmental consequences of the Proposed Action and ascertain the extent to which the consequences of the Proposed Action are consistent with the objectives of Florida Coastal Management Program (CMP).

Of the Florida Statutory Authorities included in the CMP, impacts in the following areas are addressed in the EA: beach and shore preservation (Chapter 161), historic preservation (Chapter 267), economic development and tourism (Chapter 288), public transportation (Chapters 334 and 339), saltwater living resources (Chapter 370), living land and freshwater resource (Chapter 372), water resources (Chapter 373), environmental control (Chapter 403), and soil and water conservation (Chapter 582). This consistency statement discusses how the proposed options may meet the CMP objectives.

CONSISTENCY DETERMINATION

Chapter 161: Beach and Shore Preservation

No disturbances to the base's canals are foreseen under the Proposed Action or Alternative Actions.

Chapter 267: Historic Preservation

The Air Force and the Florida State Historic Preservation Officer have determined that the Proposed Action will have no effect on historic properties associated with the Base.

Chapter 288: Economic Development and Tourism

The EA presents the new employment impact and net income impact of the Proposed Action and alternative. The options would not have significant adverse effects on any key Florida industries or economic diversification efforts.

Chapter 372: Saltwater Living Resources

The EA addresses potential impacts to local water bodies. Water quality impacts were surveyed for existing conditions at the Proposed Action and alternatives. Results indicate that no impacts would result from the Proposed Action or alternatives.

Chapter 372: Living Land and Freshwater Resources

Threatened and endangered species, major plant communities, conservation of native habitat, and mitigation of potential impacts to the resources are addressed in the EA. The

Proposed Action and alternatives would not result in permanent disturbance to native habitat and should not significantly impact threatened or endangered species.

Chapter 373: Water Resources

There would be no impacts to surface water or groundwater quality under the Proposed Action or alternatives as discussed in the EA.

Chapter 403: Environmental Control

The EA addresses the issues of conservation and protection of environmentally sensitive living resources; protection of groundwater and surface water quality and quantity; potable water supply; protection of air quality; minimization of adverse hydrogeologic impacts; protection of endangered or threatened species; solid, sanitary, and hazardous waste disposal; and protection of floodplains and wetlands. Where impacts to these resources can be identified, possible mitigation measures are suggested. Implementation of mitigation will, for the most part, be the responsibility of MacDill AFB.

Chapter 582: Soil and Water Conservation

The EA addresses the potential of the Proposed Action and alternatives to disturb soil and presents possible measures to prevent or minimize soil erosion. Impacts to groundwater and surface water resources also are discussed in the EA.

CONCLUSION

The Air Force finds that the conceptual Proposed Action and alternatives plans presented in the EA are consistent with Florida's CMP.

APPENDIX C

AGENCY COORDINATION LETTERS

THE TAMPA TRIBUNE

Published Daily

Tampa, Hillsborough County, Florida

State of Florida }
County of Hillsborough } ss.

Before the undersigned authority personally appeared Jean Lantaigne who on oath says that she is the Assistant Credit Manager of the Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

CLASSIFIED LEGAL

in the matter of

PUBLIC NOTICE UNITED STATES AIR FORCE
NOTICE OF AVAILABILITY EIAP DOCUMENTS

was published in said newspaper in the issues of

9/29/2004

TAMPA TRIBUNE

AD#133615

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

Jean E. Lantaigne

Sworn to and subscribed by me, this
of NOVEMBER

19TH

day

A.D. 2004

Personally Known ☒ or Produced Identification

Type of Identification Produced

Shelby Herstone

SHELBY HERSTONE



PUBLIC NOTICE UNITED STATES AIR FORCE

The Air Force (AF) seeks public comment on AF Environmental Impact Analysis Process (EIAP) documents for a project at MacDill Air Force Base. The Replacement of Military Family Housing - Phase VA project will involve construction of 61 new military housing units, 41 buildings and associated structures, and the demolition of 152 existing standard housing units (22 buildings), two multi-bay garage units, associated accessways, and parking lots located in the northeastern section of MacDill AFB. This project would provide modern efficient housing for MacDill AFB military personnel and their families. MacDill AFB has evaluated this action in accordance with Executive Order 11988 - Floodplain Management and believes there is no potential for adverse effects on floodplain activities within the floodplain.

NOTICE OF AVAILABILITY

The EIAP documents satisfy the requirements of the National Environmental Policy Act (NEPA). The documents are available for public review and comment from September 30, 2004 through October 1, 2004 at the John F. Germany Public Library located at 900 N. Ashley Drive, Tampa, FL 33606. The documents may be found in the Humanities section of the Main Library. Address written comments to the 6 AMV Public Affairs, 8209 Hangar Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is (813) 828-2215.



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PUBLIC NOTICE - UNITED STATES AIR FORCE

The Air Force (AF) seeks public comment on AF Environmental Impact Analysis Process (EIAP) documents for a project at MacDill Air Force Base. The Replacement of Military Family Housing - Phase VI project would involve construction of 61 new military housing units (41 buildings) and associated structures, and the demolition of 152 existing substandard housing units (22 buildings), two multi-bay garage units, associated accessways, and parking lots located in the northeastern section of MacDill AFB. This project would provide modern, efficient housing for MacDill AFB military personnel and their families. MacDill AFB has evaluated this action in accordance with Executive Order 11988-Floodplain Management, and believes there is no practical alternative to completing construction activities within the floodplain.

NOTICE OF AVAILABILITY

The EIAP documents satisfy the requirements of the National Environmental Policy Act (NEPA). The documents are available for public review and comment from September 30, 2004 through October 31, 2004 at the John F. Germany Public Library, located at 900 N. Ashley Drive, Tampa, FL 33606. The documents may be found in the Humanities Section of the Main Library. Address written comments to the 6 AMW Public Affairs, 8209 Hangar Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is (813) 828-2215.

133615

September 29, 2004

7536

of the sheriff's office, recently exchanged his department-issued revolver for a semiautomatic handgun.

The week before the shooting, he trained with the new weapon, Reder said.

Reder said Johnson will be retrained.

Crash On I-275 Closes 3 Lanes

TAMPA—A wreck involving two tractor-trailers on Interstate 275 near the Ashley Drive exit closed three lanes

Department said Sunday responded to a call about a body at Lake Shore Park, a mobile home community, at 1:08 p.m.

They found Robert D. Ditton, 800 32nd Ave. S., Lot 616, dead between two mobile homes, Proffitt said.

Proffitt said Ditton was behind Lot 618, which was his.

Proffitt said Ditton died of "upper body trauma."

Proffitt said the injuries were of a nature that "warrant treating it as a homicide."

Astaffreport

Good Deed Cost A Mother, 14-Year-Old Son Their Lives

PERSON BEING HELPED ON I-75 ALSO KILLED

The Associated Press

NORTH PORT — A woman killed with one of her sons when they got out of their vehicle to help a motorcyclist after a freeway crash is being remembered as a mother who often stressed to her children the importance of being good Samaritans.

Marsha Gambill, 36, and her oldest son, Brian Gambill, 14, died Saturday on Interstate 75 in Southwest Florida when a van smashed into them and motorcyclist Brian Dess in the darkened median. Dess also died.

"I just can't believe it. She was a good, churchgoing woman who loved her sons," said Gambill's Cape Coral neighbor Tony Grande. "She was tickled pink when she moved out to the Cape three years ago and [to] have her boys going to good schools."

"She worked six days a week and long hours to be sure her boys had the things they needed." Her other son, 12-year-old Brad, was not with her at the time of the accident, the Florida Highway Patrol said.

Patrol officials said Tuesday that lighting on that stretch of interstate was

knocked out by Hurricane Charley.

"It would have helped, but it wouldn't have prevented it," patrol spokesman Doug Dodson said. "It just happened too quick."

The Gambills were returning from a Pop Warner football game in Venice on Saturday night when they stopped on Interstate 75 in North Port after Dess hit a van and was thrown into the path of Gambill's sport utility vehicle, the patrol said.

The Gambills got out and were running to help Dess when a van driven by Bernard Broering, 65, of Bonita Springs, hit all three of them, the patrol said.

Dodson said it wasn't clear whether Dess, 49, of Punta Gorda, was killed in the initial crash. Two motorcyclists who were with Dess also were running toward him when the second accident occurred and told troopers the chain of events happened in seconds, Dodson said.

No charges have been filed, Dodson said.

At Gulf Middle School in Cape Coral, which Brian Gambill attended, students wrote notes of remembrance and left them on his desk.

"They were being good Samaritans by stopping to help someone else, really," Principal Bill Lane said.

Domestic Violence 1 Month for DoD

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it will have an
generations.

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90 percent of
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do not report
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partners. This

cycle ensures that without drastic change,
battering will be a major social concern for
our great, great grand-children and theirs
and so on.

Child abuse is more likely to occur in
families where domestic violence is pres-
ent. In a national survey, 50 percent of the
men who frequently assaulted their wives
also frequently abused their children.

Children who witness violence at home,
or, who are abused themselves, often dis-
play emotional and behavioral distur-
bances as diverse as withdrawal, low self-
esteem, nightmares, self-blame and
aggression against peers, family members
and property.

So, what can you do? If you are in an
abusive relationship, call for help ... for
yourself and your child. If you are abusing,
stop now and get help. If you are an active
duty co-worker, supervisor or commander,
remember, you are a mandated reporter!
Call Family Advocacy at 827-9172. (*Cour-
tesy of the Family Advocacy Program*)

PUBLIC NOTICE

The Air Force seeks public comment on AF Environmental Impact Analysis Process documents for a project at MacDill Air Force Base. The Replacement of Military Family Housing - Phase VI project would involve construction of 61 new military housing units (41 buildings) and associated structures, and the demolition of 152 existing substandard housing units (22 buildings), two multi-bay garage units, associated accessways, and parking lots located in the northeastern section of MacDill. This project would provide modern, efficient housing for MacDill's military personnel and their families. MacDill has evaluated this action in accordance with Executive Order 11988 - Floodplain Management, and believes there is no practical alternative to completing construction activities within the floodplain.

NOTICE OF AVAILABILITY

The EIAF documents satisfy the requirements of the National Environmental Policy Act. The documents are available for public review and comment from Sept. 30, to Oct. 31, 2004 at the John E. Germany Public Library, located at 900 N. Ashley Drive, Tampa, FL 33606. The documents may be found in the Humanities Section of the Main Library. Address written comments to the 6 AMW Public Affairs, 8209 Hangar Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is 828-2215.

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ley, Frances,
Jeanne





FLORIDA DEPARTMENT OF STATE
Glenda E. Hood
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Mr. R. Daniel Lewis
MACTEC Engineering and Consulting, Inc.
4919 West Laurel Street
Tampa, Florida. 33607

September 30, 2004

RE: DHR Project File Number: 2004-9163
Received by DHR September 29, 2004
MACTEC No. 6515-03-0150.01
Environmental Assessment and Finding of No Significant Impact
Replace Military Family Housing – Phase VI
MacDill Air Force Base, Hillsborough County

Dear Mr. Lewis:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties* and the *National Environmental Policy Act of 1969*, as amended. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

Based on the information provided, this office concurs with your finding that the proposed undertaking will have no effect on historic properties.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail sedwards@dos.state.fl.us, or at 850-245-6333 or 800-847-7278.

Sincerely,

Laura A. Kammerer, Deputy SHPO

for Frederick Gaske, Director, and
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6435

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6436

☒ Historic Preservation
(850) 245-6333 • FAX: 245-6437

☐ Historical Museums
(850) 245-6400 • FAX: 245-6433

☐ Palm Beach Regional Office
(561) 279-1475 • FAX: 279-1476

☐ St. Augustine Regional Office
(904) 825-5045 • FAX: 825-5044

☐ Tampa Regional Office
(813) 272-3843 • FAX: 272-2340



DEPARTMENT OF THE AIR FORCE
6TH AIR MOBILITY WING (AMC)
MACDILL AIR FORCE BASE, FLORIDA

JUL 28 2004

MEMORANDUM FOR US FISH AND WILDLIFE SERVICE
9549 Koger Blvd, Suite 111
St. Petersburg FL 33702

AUG 1 - 2004

FROM: 6 CES/CD
7621 Hillsborough Loop Drive
MacDill AFB FL 33621-5207

SUBJECT: Construction of Military Family Housing - Phase VI at MacDill Air Force Base (AFB), Florida

1. MacDill AFB intends to implement a large military family housing construction/demolition project with the goal of providing modern, safe, and energy efficient living quarters for military personnel. The project would involve two major actions, the first of which would be the demolition of approximately 20 existing substandard buildings. The second phase of the project would involve the construction of approximately 48 new single- and multifamily housing buildings.
2. A representative from the MacDill AFB Natural Resources staff surveyed the sites to determine if any threatened or endangered species inhabited them. The area proposed for construction of the new housing units is within the existing housing area on MacDill AFB. The area has not been identified as critical habitat for any threatened or endangered species. Consequently, MacDill AFB believes that the proposed project would not adversely impact threatened or endangered species. If the US Fish and Wildlife Service agrees with this assessment, please document your concurrence by signing and dating where indicated below. If you would like to inspect the proposed construction site, please contact the MacDill AFB Natural Resources staff.
3. If you have any questions or require additional information on the proposed project, please contact Mr. Jason Kirkpatrick at (813) 828-0459.



FWS Log No 04-1816

The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) This finding fulfills the requirements of the Act.

GENE A. ROGERS, GS-13
Deputy Base Civil Engineer

Don Palmer
Acting Assistant Field Supervisor

8/10/04
Date

AMC--GLOBAL REACH FOR AMERICA

Attachments:

Figure 1 - Demolition of Existing Military Family Housing Site Plan, Construction of Military Family Housing - Phase VI, MacDill Air Force Base, Florida

Figure 2 - Military Family Housing Master Plan, Construction of Military Family Housing - Phase VI, MacDill Air Force Base, Florida

Photograph 1: Existing and Proposed New Military Family Housing Area, Kenwere Drive and Bayshore Boulevard, MacDill Air Force Base, Florida

1st IND, US Fish & Wildlife Service

MEMORANDUM FOR 6 CES/CD

Date: _____

The US Fish and Wildlife Service agrees that the proposed construction project described above will not adversely impact threatened or endangered species on MacDill Air Force Base.

U.S. Fish and Wildlife Service Representative



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

December 3, 2004

Mr. R. Daniel Lewis, P.G.
MACTEC Engineering and Consulting, Inc.
4919 West Laurel Street
Tampa, Florida 33607

RE: Department of the Air Force – Draft Environmental Assessment – Replace Military
Family Housing, Phase VI, MacDill Air Force Base – Hillsborough County, Florida.
SAI # FL200410050091C

Dear Mr. Lewis:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the referenced draft environmental assessment (EA).

Based on the information contained in the draft EA and comments provided by our reviewing agencies, the state has determined that the subject project is consistent with the Florida Coastal Management Program.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Lauren P. Milligan at (850) 245-2163.

Sincerely,

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/lm

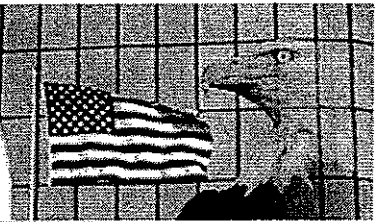
Enclosures



Florida

Department of Environmental Protection

"More Protection, Less Process"



Categories

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Project Information	
Project:	FL200410050091C
Comments Due:	November 03, 2004
Letter Due:	December 03, 2004
Description:	DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT - REPLACE MILITARY FAMILY HOUSING, PHASE VI, MACDILL AIR FORCE BASE - HILLSBOROUGH COUNTY, FLORIDA.
Keywords:	USAF - REPLACE MILITARY FAMILY HOUSING, PHASE VI, MACDILL AFB - HILLSBOROUGH CO.
CFDA #:	12.200
Agency Comments:	
COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS	
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
No Comment	
STATE - FLORIDA DEPARTMENT OF STATE	
NO COMMENT	
SOUTHWEST FLORIDA WMD - SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	
ENVIRONMENTAL POLICY UNIT - OFFICE OF POLICY AND BUDGET, ENVIRONMENTAL POLICY UNIT	
No Comment	
TAMPA BAY RPC - TAMPA BAY REGIONAL PLANNING COUNCIL	
HILLSBOROUGH - HILLSBOROUGH COUNTY	

For more information please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

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COUNTY: HILLSBOROUGH

SCH-USAf-MD

2004-10101

DATE: 10/4/2004

COMMENTS DUE DATE: 11/3/2004

CLEARANCE DUE DATE: 12/3/2004

SAI#: FL200410050091C

MESSAGE:

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
COMMUNITY AFFAIRS	SOUTHWEST FLORIDA WMD	ENVIRONMENTAL POLICY UNIT	
ENVIRONMENTAL PROTECTION			
X STATE			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT - REPLACE MILITARY FAMILY HOUSING, PHASE VI, MACDILL AIR FORCE BASE - HILLSBOROUGH COUNTY, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA Federal Consistency

- | | |
|--|---|
| <input checked="" type="checkbox"/> No Comment | <input checked="" type="checkbox"/> No Comment/Consistent |
| <input type="checkbox"/> Comment Attached | <input type="checkbox"/> Consistent/Comments Attached |
| <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Inconsistent/Comments Attached |
| | <input type="checkbox"/> Not Applicable |

From:

Division of Historical Resources
Division/Bureau: Bureau of Historic Preservation

Reviewer: S. EDWARDS

Date: 10-20-04

NHPA / X: 4-8154

Laura R. Kemmerer, Deputy SHPO
10.21.2004

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BUREAU OF
HISTORIC PRESERVATION
04 OCT -7 AM 11:39



Chair
Commissioner Steve Simon

Vice-Chair
Commissioner Jane von Haljmann

Secretary/Treasurer
Robert Kersteen

Executive Director
Manny Pumariega

October 27, 2004

R. Daniel Lewis, Senior Geologist
MACTEC Engineering & Consulting, Inc.
4919 West Laurel Street
Tampa, FL 33607

*Subject: IC&R #240-04, MacDill Air Force Base Military Family Housing Replacement
Phase VI Environmental Assessment, FSC SAI #FL200410050091C, Hillsborough
County*

Dear Mr. Lewis:

The Tampa Bay Regional Planning Council recently received a copy of your submittal from the Florida State Clearinghouse for processing under the Intergovernmental Coordination and Review (IC&R) Program.


While our agency **does not** find the proposal to be regionally significant, all member local governments of the TBRPC's Clearinghouse Review Committee and/or full policy board will be notified of the application. You will be contacted if any local concerns are identified.

In accordance with the State's delegated IC&R review requirements, this project is considered to have met the local requirements of the IC&R process and no further review will be required by our Agency. This letter constitutes compliance with IC&R only and does not preclude the applicant from complying with *other* applicable requirements or regulations.

If deemed necessary, please forward a copy of this letter to the federal funding agency to verify compliance with the required Intergovernmental Coordination and Review procedures.

If you have any questions, please do not hesitate to contact me (ext. 29).

Sincerely,



John M. Meyer
IC&R Coordinator

cc: Ms. Lauren Milligan, FSC

APPENDIX D

AIR EMISSION CALCULATIONS FOR PROJECT

**REPLACE MILITARY FAMILY HOUSING - PHASE VI
MAC DILL AFB, FLORIDA
CONSTRUCTION SITE AIR EMISSIONS ESTIMATES
(Combustive Emissions of ROG, NOx, SO2, CO and PM10 Due to Construction)**

16-Aug-04

Input:

Total Building Area: 185,000 ft²
 Total Paved Area: 250,000 ft²
 Total Disturbed Area: 30.0 acres
 Construction Duration: 2.0 years
 Annual Construction Activity: 260 days/yr

Estimation:

New Phase VI Military Family Housing @185,000 sq.ft. tota
 Pavement Area Estimated at **250,000** sq. ft.
Duration: 2 years

Results:[Average per Year Over the Construction Period]

	ROG	NOx	SO2	CO	PM10
Emissions, lb/day	59.63	185.60	9.36	156.03	16.04
Emissions, tons/yr	7.75	24.13	1.22	20.28	2.09

Calculation of Unmitigated Emissions

Summary of Input Parameters

	ROG	NOx	SO2	CO	PM10
Total new acres disturbed:	30.00	30.00	30.00	30.00	30.00
Total new acres paved:	5.74	5.74	5.74	5.74	5.74
Total new building space, ft ² :	185,000	185,000	185,000	185,000	185,000
Total years:	2.00	2.00	2.00	2.00	2.00
Area graded, acres in 1 yr:	15.00	15.00	15.00	15.00	15.00
Area paved, acres in 1 yr:	2.87	2.87	2.87	2.87	2.87
Building space, ft ² in 1 yr:	92,500	92,500	92,500	92,500	92,500

Annual Emissions by Source (lbs/day)

	ROG	NOx	SO2	CO	PM10
Grading Equipment	3.8	24.0	1.6	5.2	4.2
Asphalt Paving	0.75	0.0	0.0	0.0	0.0
Stationary Equipment	15.5	12.7	0.8	2.7	0.7
Mobile Equipment	14.8	148.9	6.9	148.1	11.1
Architectural Coatings (Non-Res)	24.8	0.0	0.0	0.0	0.0
Total Emissions (lbs/day):	59.63	185.60	9.36	156.03	16.04

Emission Factors

Reference: Air Quality Thresholds of Significance, SMAQMD, 1994.

Source	SMAQMD Emission Factor				
	ROG	NOx	SO2 *	CO *	PM10
Grading Equipment	2.50E-01 lb/acre/day	1.60E+00 lb/acre/day	0.11 lb/acre/day	0.35 lb/acre/day	2.80E-01 lb/acre/day
Asphalt Paving	2.62E-01 lb/acre/day	NA	NA	NA	NA
Stationary Equipment	1.68E-04 lb/day/ft ²	1.37E-04 lb/day/ft ²	9.11E-06 lb/day/ft ²	2.97E-05 lb/day/ft ²	8.00E-06 lb/day/ft ²
Mobile Equipment	1.60E-04 lb/day/ft ²	1.61E-03 lb/day/ft ²	7.48E-05 lb/day/ft ²	0.0016 lb/day/ft ²	1.20E-04 lb/day/ft ²
Architectural Coatings (Non-Res)	8.15E-02 lb/day/ft	NA	NA	NA	NA

* Factors for grading equipment and stationary equipment are calculated from AP-42 for diesel engines using ratios with the NOx factors.
 Factors for mobile equipment are calculated from ratios with Mobile5a 2001 NOx emission factors for heavy duty trucks for each site.

**REPLACE MILITARY FAMILY HOUSING - PHASE VI
CONSTRUCTION SITE AIR EMISSIONS ESTIMATES
MacDill AFB, FLORIDA
CONSTRUCTION EMISSION FACTOR**

Calculation of PM10 Emissions Due to Site Preparation (Uncontrolled).
Revised 16 June 1997.

User Input Parameters / Assumptions

Acres graded per year:	15.0	acres/yr
Grading days/yr:	49	days/yr (From "grading")
Exposed days/yr:	180	days/yr graded area is exposed
Grading Hours/day:	8	hr/day
Soil piles area fraction:	0.01	(Fraction of site area covered by soil piles)
Soil percent silt, s:	15	%
Soil percent moisture, M:	8	%
Annual rainfall days, H:	107	days/yr that rainfall exceeds 0.01 inch (Tampa, FL)
Wind speed > 12 mph %, I:	12	%
Fraction of TSP, J:	0.45	(SCAQMD recommendation)
Mean vehicle speed, S:	5	mi/hr (On-site)
Dozer path width:	5	ft
Qty construction vehicles:	2	vehicles
On-site VMT/vehicle/day:	5	mi/veh/day (Excluding bulldozer VMT during grading)

Emissions Due to Soil Disturbance Activities

Operation Parameters (Calculated from User Inputs)

Grading duration per acre	26.1 hr/acre	
Bulldozer mileage per acre	1.7 VMT/acre	(Miles traveled by bulldozer during grading)
Construction VMT per day	9 VMT/day	
Construction VMT per acre	29.4 VMT/acre	(Travel on unpaved surfaces within site)

Equations Used (Corrected for PM10)

Operation	Empirical Equation	Units	AP-42 Section (4th Edition)
Bulldozing	$0.75(s^{1.5})/(M^{1.4})$	lbs/hr	8.24, Overburden
Grading	$(0.60)(0.051)S^{2.0}$	lbs/VMT	8.24, Overburden
Vehicle Traffic	$(3.72/(M^{4.3}))^{*.6}$	lbs/VMT	8.24, Overburden

Source: Compilation of Air Pollutant Emission Factors, Vol. I, USEPA AP-42.
Section 8.24, Western Surface Coal Mining (4th Edition)

Calculation of PM10 Emission Factors for Each Operation

Operation	Emission Factor (mass/ unit)	Operation Parameter	Emission Factor (lbs/ acre)
Bulldozing	2.37 lbs/hr	26.1 hr/acre	61.9 lbs/acre
Grading	0.77 lbs/VMT	1.7 VMT/acre	1.3 lbs/acre
Vehicle Traffic	0.00 lbs/VMT	29.4 VMT/acre	0 lbs/acre

Emissions Due to Wind Erosion of Soil Piles and Exposed Graded Surface

Reference: CEQA Air Quality Handbook, SCAQMD, April 1993.

Soil Piles EF = $1.7(s/1.5)[(365 - H)/235](I/15)(J) = (s)(365 - H)(I)(J)/(3110.2941)$, p. A9-99.

Soil Piles EF = 6.7 lbs/day/acres covered by soil piles

Consider soil piles area fraction so that EF applies to graded area

Soil piles area fraction: 0.01 (Fraction of site area covered by soil piles)

Soil Piles EF = 0.067 lbs/day/acres graded

Graded Surface EF = 26.4 lbs/day/acre (recommended in CEQA Manual, p. A9-93).

Calculation of Annual PM10 Emissions

Source	Emission Factor	Graded Acres/yr	Exposed days/yr	Emissions lbs/yr	Emissions tons/yr
Bulldozing	61.9 lbs/acre	15.00	NA	929	0
Grading	1.3 lbs/acre	15.00	NA	20	0
Vehicle Traffic	0.0 lbs/acre	15.00	NA	0	0
Erosion of Soil Piles	0.1 lbs/acre/day	15.00	180	181	0
Erosion of Graded Surface	26.4 lbs/acre/day	15.00	180	71,280	36
TOTAL				72,409	36

Soil Disturbance EF: 63.2 lbs/acre

Wind Erosion EF: 26.467 lbs/acre/day

Back calculate to get EF: 98.5 lbs/acre/grading day

CONSTRUCTION (GRADING) EMISSIONS

Estimate of time required to grade a specified area.

Updated 17 June 1997.

Input Parameters

Construction area 15 acres/yr
Qty Equipment: 2

Assumptions.

Terrain is mostly flat.

Terrain is populated with medium brush; trees are negligible.

An average of 6" soil is removed during stripping.

An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.

200 hp bulldozers are used for site clearing.

300 hp bulldozers are used for stripping, excavation, and backfill.

Vibratory drum rollers are used for compacting.

Stripping, Excavation, Backfill and Compaction require
an average of two passes each.

Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 6th Ed., R. S. Means, 1992.

Means Line No.	Operation	Description	Output	Units	Acre/(equip)(day)	(Equip)(day)/acre	Acres/yr	(Equip)(days)/yr
021 108 0550	Site Clearing	Dozer & rake, medium brush	0.6	acre/day	0.6	1.67	15.00	25.00
021 144 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	15.00	7.33
022 242 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	7.50	7.56
022 208 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	7.50	3.10
022 226 5020	Compaction	Vibrating roller, 6 " lifts, 3 passes	1,950	cu. yd/day	2.42	0.41	15.00	6.21
TOTAL								49.20

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 49.20

Qty Equipment: 2

Grading days/yr: 49.20

Round to 49 grading days/yr
